

Alexander, J. L. on Housing Needs of the Aged

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REHABILITATION LITERATURE

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REHABILITATION LITERATURE

CONTENTS

December, 1960, Volume 21, No. 12

	Page
Article of the Month	370
Housing Needs of the Aged, by Alexander Kira	
Special Report	378
The Problem of Disability Arising from Neglected Trauma, by J. Francis Silva, F.R.C.S., F.I.C.S., F.A.C.S.	
Book Reviews	380
Digests of the Month	385
The Variety and Extent of Problems Requiring Rehabilitation, by Herbert W. Park, M.D.	
In: <i>Proceedings of the Fifth Annual North Carolina Conference on Handicapped Children, Devoted to Rehabilitation of the Physically Disabled</i>	
Published by: The North Carolina Health Council	
Rehabilitation—A New Dimension in Medicine, by Robert D. Wright, M.D.	
In: <i>J. Med. Education</i> . Oct., 1960	
Abstracts of Current Literature	387
Events and Comments	399
Author Index	Inside Back Cover

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REHABILITATION LITERATURE

Article of the Month

Housing Needs of the Aged

With

A Guide to Functional Planning

For the Elderly and Handicapped

Alexander Kira

About the Author . . .

Alexander Kira, assistant professor of architecture at Cornell University, Ithaca, N.Y., is also assistant director of the Housing Research Center at Cornell. He holds degrees of Bachelor of Architecture and Master of City and Regional Planning from Cornell. After several years' association with engineering, architectural, and design firms, Mr. Kira returned to Cornell in 1957 to assume his present duties. He has directed or collaborated on research in the psychology of residential lighting, measurement of housing quality, space planning, human values in relation to housing, and problems of housing for the aged. A member of the Building Research Institute, Mr. Kira is the author of *Housing Requirements of the Aged—A Study of Design Criteria* (New York State Division of Housing, 1958) and a contributor to the forthcoming edition of the architectural handbook *Time Saver Standards*. This original article was written especially for *Rehabilitation Literature*.

ONE OF THE AREAS of major domestic concern today is the nation's rapidly expanding aged population. This concern is often expressed in terms of housing. Housing, however, is only a part of the problem or, put another way, only a part of the solution. In a sense one can draw a parallel here between this limited approach to the problems of the aged and the attitudes that for so long characterized our approach to the problems of the slums, *i.e.*, that the provision of clean and attractive housing would solve everything. As has since been recognized, this is far from being the case. The problems of the slums, like those of the aged, are complex and comprehensive. The physical manifestations are only one aspect of the broader problem that must be dealt with—this is the total environment: social and psychological as well as physical.

Immense though some of the problems of the present moment may be, they are problems of only a transitional period. In the coming decades we may expect to have even larger numbers of elderly and retired persons who presumably will have a still longer life expectancy, who may well be healthier in general, and who will enjoy better financial circumstances. Although the trend toward a shorter work week and earlier and compulsory retirement may conceivably present some new problems of physical and mental health, there would seem to be, generally speaking, an increased potential for a longer and healthier period of life after retirement. In addition to the social security program and the various supplementary public programs likely to come into being in the near future, we must consider the tremendous growth of pension plans, the full impact of which has yet to be felt. All this portends a completely

new era in living patterns, social structure, and, quite probably, thought and philosophy as well, since many of us are now close to realizing our rewards and earning our rest in this world rather than in the next. The obvious implication in all this from a political standpoint is that the aged will no longer be a forgotten minority nagging at our consciences but rather a vital and integral part of society.

Definition of Housing

When we examine the topic of housing for the aged, we find that the term embraces an extremely broad range of accommodations. It is significant to note that the term is used to include in addition to housing in its generally accepted sense, various institutional accommodations ranging all the way from old age homes to nursing homes and hospitals. This raises some interesting questions about the utilization of our medical, institutional, and housing resources. On the one hand, it is obvious that many of our aged persons are not completely capable of managing for themselves in a normal home environment—an implicit part of our everyday definition of housing. It is becoming equally as obvious, on the other hand, that housing those persons in specialized institutions and hospitals is, in many instances, an expensive and wasteful procedure.

It has been estimated that more than a quarter of the elderly patients in our mental hospitals could be accommodated in other, less specialized and less expensive institutional settings, if they were available. Similarly, many of the aged who at present are housed in nursing homes and other long-term care settings could be accommodated in semi-independent housing—if it were available. What has happened is that we have failed to provide a sufficient variety and supply of living accommodations and of supporting community services. The result has been an unhappy and wasteful situation for the individual as well as for the community. Of course, this is true not only of the aged; it is repeated many times over in our general pattern of medical and institutional care. With respect to the aged, however, it raises the question of distinguishing rather clearly between the acutely medical aspects and the general care aspects of an individual's circumstances and then providing suitable arrangements. Acute medical needs will have to continue to be met on a temporary or permanent inpatient basis, but housing, housekeeping help, and minor medical and nonmedical care might well be provided for in other ways. The scope of this problem and the human waste entailed are well appreciated in most medical and institutional circles. Only recently has it come to be recognized by society in general and in particular by those persons and agencies concerned with housing.

Types of Housing Accommodations

When we examine the variety of housing types that seem necessary in order to most effectively accommodate the

aged population, we find that on the general basis of health status the aged may be grouped into six broad categories.

I. *Persons generally in good health who prefer independent living*

A. *Characteristics of individuals*

Couple or single or widowed individual
Physically self-sufficient
Economically independent
Able to make or maintain needed social ties
Able to satisfy activity needs

B. *Types of dwellings desired*

House, apartment, mobile home
Size compatible with size of household and physical condition
Design features minimizing physical exertion and care and maximizing safety

C. *Community facilities requirements*

Because this group has access to and uses transportation, emphasis is not placed on location of community facilities. However, good, well-located facilities will contribute to independent living for a maximum period of time
Portion of this group may desire the type of facilities provided in day center

II. *Persons generally in good health who prefer congregate living*

A. *Characteristics of individuals*

Couple or individuals, most often single or widowed individuals
Physically self-sufficient but may be seeking lessened responsibilities
Economically independent, but decreased income may make smaller, lower-rent units have special appeal
May have greater need for socialization opportunities than Group I

B. *Types of dwellings desired*

Housing or apartment projects designed for the aged, residential clubs, retirement villages
Special design incorporating features emphasizing easier living arrangements

C. *Community facilities requirements*

Developments generally provide a variety of community facilities, ranging from dining, recreational, and possibly medical facilities to stores and churches
Development likely to be center for special facilities for the aged of the larger community (neighborhood or larger community depending on size)

III. *Persons with some infirmities or health problems who prefer independent living*

A. *Characteristics of individuals*

Couples or individuals

Have some physical problems—limited mobility
Varying economic situations but would tend to be those in a good economic situation who could afford special services or those in a poor economic situation served by social programs

Often those not desiring to be uprooted from old neighborhood, home, family, and friends

B. *Types of dwellings desired*

House, apartment, room

Special design features usually essential to a degree—rehabilitative

C. *Community facilities requirements*

For those completely ambulatory, near-by complete community facilities are essential

Special medical facilities such as outpatient clinics may be necessary for maintenance of this degree of independence

For many persons special community programs are needed: "friendly visiting," shopping services, housekeeping services, visiting nurse or "meals-on-wheels" programs

IV. *Persons with some infirmities or health problems who prefer congregative living*

A. *Characteristics of individuals*

Couples or individuals, but most often single or widowed individuals

Frequently have limited mobility

May be seeking to increase opportunities for socialization

May be seeking easier, more carefree life and lessened responsibilities

May be seeking security of life care

B. *Types of dwellings desired*

Residential center (rooms, apartments, cottages with services provided)

Special design: safer, easier living, rehabilitative

Services that may be necessary include medical, general care, housekeeping, dining, and recreation

C. *Community facilities requirements*

Facilities are generally provided as part of the development

V. *Convalescent, infirm, or disabled persons*

A. *Characteristics of individuals*

Need continuous institutional care but limited medical care

May be bedridden or disabled

B. *Types of dwellings desired*

Nursing or convalescent home

Standards allowing greatest independence and most normal living possible

C. *Community facilities requirements*

Location can be an important factor in allowing visitors to reach the institution easily

VI. *Acutely or chronically ill persons*

A. *Characteristics of individuals*

Need continuous medical care

B. *Types of dwellings desired*

Geriatrics hospital, chronic disease hospital, mental hospital

C. *Community facilities requirements*

Relationship to community facilities is no longer a concern

Individual Needs

While it can be generalized that the aged as a group are subject to a progressive decline in physical and mental health and capabilities, by no means all of the aged are infirm or in dire need of all those special design features that for so long have tended to characterize discussions of housing for the aged. For the great majority of the aged who have their health and who are able, actually or potentially, to lead relatively normal lives, housing may be said to have a preventive rather than a therapeutic role. Proper housing, in terms of the type of unit and its particular features, can lessen the danger of disabling accidents. It can lessen the strains of housekeeping. It can lessen the strains and frustrations of living alone or with relatives.

One of the consistently astounding things about people, and one which we unfortunately tend to take advantage of, is their range of tolerance for discomfort and inconvenience. Even today, we continue to build far too many dwellings that violate all common sense and all principles of good planning and safety. In the case of younger persons, this rarely causes any serious difficulty. In the case of the aged, however, these inconveniences and nuisances become serious problems and danger areas. Windows over bathtubs, protruding medicine cabinets, poorly located light switches and ceiling pull cords, poorly designed kitchen appliances, impossible-to-get-at storage spaces, and a host of other similar situations pose very real threats to their comfort or safety. (A more complete outline of sound design criteria begins on next page.) If we are to keep the number of disabled and handicapped aged persons to a minimum, the scrupulous avoidance of such hazards should be our first obligation.

This group should have the benefit of all the research of good planning and design leading to better livability so as to enable them to lead healthy and independent lives as long as possible. Looked at in this way, housing can play a vital role as a preventive device. As persons concerned professionally with health programs are well aware, such preventive measures are eminently worth achieving and are equally as important, from an over-all point of view, as caring for those with premature, perhaps needless, acute medical problems. Indeed, it may well be that our present concern with housing for the aged will ultimately lead to proper housing for all of us.

For another large segment of the aged population, those with varying degrees of dependent needs, housing may be regarded as a therapeutic or rehabilitative device. Many aged persons, including some of those presently—and needlessly—housed in various institutional settings, could lead happy and independent lives in a normal community environment if some of the special features for the handicapped were provided. Others can manage most activities without help but may need certain aids or services, possibly in a communal setting. These aids may be simply house cleaning services or dining facilities or may involve complete custodial, but not medical, care, as in cases of prolonged convalescence.

Although such special features and services are valid and desirable, it must not be presumed that simply providing them solves the problem. They do permit the partially disabled person to carry on normal day-to-day activities and help him to maintain or to develop a sense of self-sufficiency. This is important from the point of view of the individual's own happiness and because of the like-

lihood that it will enable him to maintain the will power and spirit to go on for a far longer period than he otherwise might. One of the basic premises in rehabilitation work, and one that needs greater application to the aged, is the importance of the person's mental outlook to the success of any rehabilitative work. In all too many cases in dealing with the aged we have in effect said, "Here is your 'crutch'—good luck!" While "crutches" are necessary and desirable, it is also true that such devices may not function without a healthy psychological and sociological environment.

Therefore, in any broad program aimed at encouraging a purposeful and self-sustaining life for our aged persons, a supporting system of medical, psychological, and social services is essential. It is not enough simply to remove these persons from expensive institutional and hospital environments and provide them with the finest possible housing accommodations. Many of them will require a wide range of medical, nursing, rehabilitative, and therapeutic services before they can realize their full potential

Design and Planning Criteria for Housing for the Aged

The following criteria are not intended as hard and fast standards for housing the aged but rather as guides to desirable objectives. While the specific items cover a wide range of problems, not all of them apply to every housing situation. Many of these criteria, on the other hand, are simply basic good planning principles applicable to all housing. In housing the physically disabled and handicapped, reference should be made to the various specialized requirements.

Design and Planning Principles

In very general terms the criteria for planning housing accommodations for the aged are:

- a. Small size and compactness for convenience and economy.
- b. Fireproof construction and planning for maximum safety.
- c. Minimizing the problems and effort of house-keeping and daily activities.
- d. "Livability," pleasantness, and the effect of spaciousness.
- e. A high degree of privacy.
- f. Careful avoidance of an institutional look.

With respect to the different functional areas of the dwelling, a number of specific considerations should also be observed.

Leisure areas

Because the aged as a group are by and large retired, a comfortable and pleasant living area is highly important. A few factors to consider are:

- a. Interesting views and southerly orientation should be provided, if possible.
- b. Privacy should be provided from the front door.
- c. If a dining area is to be included as a part of the living area, it is often desirable to locate the table by a window, with a light and/or convenience outlet easily accessible.

Sleeping areas

A separate bedroom is usually considered necessary for two-person occupancy but a sleeping alcove or combined living-sleeping arrangement is often satisfactory for single persons.

The sleeping alcove is generally more satisfactory than the living-sleeping arrangement because it does not have the drawbacks of lack of privacy and a tendency to be untidy and unkempt. The alcove should be large enough to accommodate all the essential items of any sleeping area and there should always be an operable window for light and ventilation.

The bedroom should be large enough to accommodate twin beds.

Regardless of which arrangement is used, the following considerations should be observed:

- a. The space should permit placement of the bed so that a minimum clearance of 18 inches can be left on three sides. This facilitates bed-making and also any nursing that may be necessary. At least 5 feet at one side of the bed should be allowed for a wheel chair.
- b. There should be space for a large bedside table

ARTICLE OF THE MONTH

and acquire a new outlook on life. This also suggests that the various dependent-accommodations, and particularly those that might truly be called nursing homes, should be closely related with major medical and rehabilitative operations. One of the sad aspects of our present situation is the numbers of aged persons who are literally vegetating in various states of invalidism in "homes" and institutions across the country because of lack of contact with the mainstream of modern health services.

In all these situations, however, careful evaluation is needed of both the individual's and the community's resources. It must be pointed out that there may also be a danger in overdoing this approach to self-sufficiency that

might lead to a considerable drain on a community's economic and social facilities and on the individual's physical capabilities. There is, for example, little question about the desirability of providing young disabled persons with the specialized accommodations permitting them to lead productive, purposeful, and more or less independent lives. In the case of elderly disabled persons, however, there may well be a question as to whether or not many of them have the reserves of physical energy or even the desire to cope successfully and happily with the devices and problems of everyday existence. Similarly, there may be questions of public policy in determining whether the community can support all the necessary home-care and

to hold medicines, water, tissues, and such.

- c. The space should be such as to permit placement of the bed so that a bedridden person can see out the window.
- d. There should be a convenience outlet, switched from the door, near the bed to permit a bed lamp to be used as a night light.
- e. There must be a short and direct access from the bed to the bathroom.
- f. In institutional settings, it is often desirable to provide a bell or buzzer near the bed so that a person can summon assistance.

Bathrooms

From the standpoint of safety and convenience, the proper location and arrangement of the bathroom is of utmost importance. Many of the difficulties and accidents that the aged experience occur in, or on the way to, the bathroom, particularly since a number of activities that occasion its use are of an emergency nature. Some important considerations are:

- a. Interior bathrooms are acceptable if adequately lighted and ventilated. Windows may actually be undesirable because of considerations such as drafts or safety.
- b. A minimum area of 35 to 40 square feet but possibly 50 to 60 square feet in order to accommodate crutches or wheel chairs.
- c. Bathroom light switch located outside the door.
- d. Doors capable of being opened from the outside.
- e. Towel rods made of metal or wood securely mounted since they are often used for support.
- f. Grab bars located at toilet and tub or shower.
- g. Toilet located next to tub can be used as a seat when filling the tub or simply for resting.
- h. Extra large, and preferably recessed, medicine cabinets.
- i. Showers with mixing controls, preferably thermostatic.
- j. Possibly a built-in or removable seat for both a tub or shower.

Kitchens

Because kitchens are potentially as dangerous as bathrooms, equal care should be given to their layout and design. Although compactness is generally desired, pullman-type kitchens are not recommended. Their extreme compactness results in awkwardness of use and dangerous reaches and stoops. A complete minimum kitchen of approximately 40 to 60 square feet is preferable and an additional 20 to 40 square feet are necessary if an eating place is to be provided.

- a. Interior locations are acceptable if adequate mechanical ventilation and lighting are provided.
- b. Placement of equipment and working surfaces should be carefully studied to avoid hazardous working conditions.
- c. To avoid excessive fatigue and danger of loss of balance and to provide needed visual as well as physical accessibility, reaches over 63 inches from the floor and under 27 inches should be avoided as much as possible.
- d. Storage spaces over ranges and refrigerators should be avoided.
- e. Sliding cabinet doors are preferable to swinging doors.
- f. Diminished senses of smell and sight make electric equipment safer than gas. On electric appliances, elements should glow when lighted and controls should be located at the front so as to avoid reaching across hot elements.
- g. Refrigerators should be self-defrosting and equipped with a large frozen food compartment. The door should be of a type that is easily opened.
- h. Garbage disposal should be particularly convenient since limited mobility leads many of the aged to store trash and garbage for dangerously long periods.
- i. Double sinks may be desirable for hand laundry if other provisions for laundry are not made.
- j. Consideration should be given to provision of laundry facilities or drying racks.

outpatient services implicit in any such broad approach aimed at fostering an independent living state for the aged. In certain circumstances, it might be preferable to encourage some persons to accept dependent living arrangements and the various aids and services they may need. An essential step, therefore, is the determination of the elements of an optimum social program for a given situation.

Societal attitudes and housing supply

Realization of the scope of problems posed by the aged segment of the population brings into sharp focus the relative one-sidedness of our thinking and our actions over

the last couple of decades. It has often been observed, for example, that this country prizes youth, perhaps inordinately. This is nowhere more apparent than in our patterns of living accommodations and, indeed, of our whole physical environment. Since the 1930's and particularly since the war, almost all our attention has been focused on the accommodation of young families with children. The entire postwar housing boom, although basically "family centered," may also be characterized as "child centered." This has been true of our architectural thinking, our subdivision developments, our public housing, and most importantly, our approach to community development. In philosophic terms, the planner's concepts for residential

Construction, Equipment, and Furnishings

In designing housing for the aged, special consideration must also be given to the selection of materials, hardware, and equipment. Some of the criteria for the selection of these items are presented below:

Floors

- a. Slippery floor surfaces should be avoided, outside as well as inside the dwelling unit. In this connection, visual slipperiness is psychologically just as dangerous as actual slipperiness. This is of particular concern in the design of lobbies and other public spaces.
- b. Suitable flooring materials include unglazed tile, cork, vinyl asbestos tile, unfinished wood, and wall-to-wall carpeting. (Throw rugs or deep-pile rugs generally are unsatisfactory because of the danger of tripping.) Unfinished wood floors are particularly satisfactory for the disabled wheelchair user because of the traction they offer. If floors are finished a special nonslip wax should be used.
- c. Floors should be smooth and level and particular care should be taken with highly jointed materials such as tile or concrete. Minor changes in floor level should be avoided whenever possible.

Doors and hardware

- a. Door openings should be 3 feet wide to permit easy passage of wheel chairs, stretchers, and persons using crutches.
- b. Door should fit properly and not bind.
- c. Large, easy-to-grasp doorknobs or lever-type handles should be used.
- d. Revolving and double-acting doors should be avoided.
- e. Sliding doors conserve valuable space and eliminate the danger of walking into half-open doors.
- f. In institutional settings, outside doors should be master keyed and all devices prohibited that cannot be operated from the outside.

Windows

- a. When possible windows should look out on an interesting view.
- b. Sill heights should be no more than 30 inches from the floor to permit seeing out while seated. A guard rail should be used for appreciably lower sill heights.
- c. Provision should be made for shading devices. Venetian blinds or draw drapes are preferable to roller shades because of the danger involved in retrieving a released shade.
- d. All operable sashes should be easily reached and effortless in operation.
- e. Insect screens, weatherstripping, and storm sash should be provided for all windows, depending upon the location and climate.

Lighting

- a. Increasing difficulty in adapting to changes in brightness calls for both a relatively uniform distribution of light and careful selection of properly shaded light sources.
- b. Illumination levels should be approximately double those normally used.
- c. There should be a sufficient number of properly located outlets, switches, and fixtures to create paths of light. The lighting system must be so arranged that a person can always easily and safely light the way ahead. Night lights and luminous switch plates help to locate switches.
- d. Use of ceiling-mounted fixtures should be carefully considered because of dangers inherent in climbing to clean fixtures and change bulbs.
- e. Convenience outlets should never be located less than 18 inches above the floor (30" to 40" above floor is preferable).

Heating

- a. The aged require a higher temperature than normal, approximately 80°F.
- b. The heating system should be quick acting and provide a uniform distribution of heat. (If younger occupants are housed in the same

ARTICLE OF THE MONTH

neighborhoods have revolved chiefly around the provision of a proper environment for children—schools, parks, and recreation facilities. In practical terms, our subdivision regulations, zoning ordinances, and urban development policies are similarly oriented. The emphasis is largely on maintaining those conditions set up as desirable by and for the younger segment of the population.

Comparatively little consideration has been given to the environmental needs of the aged. In many instances, in fact, they have been deliberately discriminated against—not because they were aged necessarily, but because their particular housing needs were in conflict with the somewhat narrow norms of the community at large. Such in-

direct discrimination may be found in dwelling and lot size restrictions calling for certain minimums often far in excess of the needs or capabilities of the aged. It may also be found in many zoning ordinances that severely restrict the possible location of apartments or of any communal or semi-institutional living accommodations. It may be found in restrictions on the renting of rooms or on the conversion of larger houses for multiple occupancy.

This situation is understandable when we consider the tremendous population growth we have been experiencing and the fact that the needs of children have been a particularly pressing issue. While this will continue to be a problem, it is equally clear that a more balanced approach

structure, consideration should be given to providing separate temperature controls or supplementary heat sources.)

- c. If steam or hot-water systems are used, exposed radiators and risers should be avoided. Exposed radiators under operable windows are particularly hazardous.

Sound control

A certain degree of acoustic privacy is perhaps more important in housing for the aged than in other residential work. Proper insulation protects privacy and assures quiet during rest periods and in event of illness. Need for acoustic protection is especially great in instances of mixed occupancy where elderly occupants may be especially sensitive to disturbing sounds, such as the noise of children.

Vertical circulation

- a. Stairs should be avoided wherever possible. One flight is felt to be the maximum the aged should generally be expected to climb.
- b. Ramps may be used for relatively small changes in level. In the case of full story heights, ramps present more of a strain than do stairs. Ramps are a necessity, however, when wheel chairs are used.
- c. When stairs are unavoidable, every precaution should be taken to make stairs as safe as possible. Criteria that should be observed include:

Risers should never be more than 7 inches high.

The proper proportion of run to rise should scrupulously be observed.

Fewer than two risers should be avoided.

Winders or curved treads should never be used.

Nonslip nosings should be used and be of a contrasting color.

Continuous handrails should be on both sides of the stair.

Handrails should be of the proper height, of

a cross section that is easily grasped, and should look, as well as be, sturdy.

Stairs should never be less than 3 feet 3 inches in clear width.

Landings should be of appropriate size and design for the particular circumstances.

No doors should ever open directly onto the stair itself.

Circulation should not cross the top of the stairs.

The staircase should be well lighted with shielded sources.

- d. Where elevators are used, special considerations should be observed with respect to their use:

Self-operated elevators should be equipped with automatic doors.

A signaling device should be provided to summon assistance.

Continuous handrails should be provided and, if the car is sufficiently large, a small bench should be considered.

An automatic leveling device is necessary and should be frequently inspected.

If there is a possibility of use by a disabled person in a wheel chair the control panel should be mounted low enough to be reached in a sitting position.

Communications and alarm systems (Applicable to institutional settings principally)

- a. An automatic fire alarm system should be provided in any building devoted exclusively to housing the aged.
- b. Because of the difficulties many elderly persons experience in bedrooms and bathrooms, especially at night, it is desirable to provide some form of signaling device whereby they can summon help. Most commonly the device sounds in a neighboring apartment or resident manager's suite.
- c. It may also be desirable to provide a conveniently located public telephone booth since many of the aged cannot afford a private telephone.

will be necessary if we hope to achieve an orderly solution to the problems of the aged segment of the population as well. The type and size of the housing units made available and how they are situated and related to the community at large are fundamental aspects of the over-all problem—aspects that in many cases may require some extensive soul-searching by those concerned with the framing of policies of community development.

Another facet of our emphasis on youth is to be found in the general rejection of the entire concept of aging with all its concomitants. This attitude has been reflected not only in our lack of provision for old age but also in a number of other important ways as well. One of these has been the feeling that the various homes and institutions for the aged are somehow shameful things that should be either avoided or relegated to some obscure corner. From a historical viewpoint, the county poor farm and some of our other earlier institutions were indeed shameful and may understandably have led to such a viewpoint. It also manifests itself in the kinds of discriminatory situations just described and in the extent to which aged persons themselves embrace the notion of living in various dependent and institutional settings. It is fortunate, however, that this attitude is slowly dying out, since it has a significant bearing on the success of any balanced program of housing.

Until old age is reached, irrespective of how one defines it, people freely accept the idea of adapting their surroundings to their needs. Throughout all stages of the life cycle, people move and change their accommodations as their household composition and economic circumstances dictate or permit. Young single people share apartments or live in a room. Young married couples generally live in a small apartment until the birth of the first or second child and then begin to look for a house. As the family increases and the children grow older a move to a still larger house frequently follows. Then all at once this process of adaption comes to a standstill except for those persons forced by circumstances to make some adjustment. By and large, our society cannot quite accept the premise that perhaps we should continue, throughout this constant state of change that is life, to adapt our living arrangements to suit our needs. To a certain extent, of course, this reluctance is understandable when we consider that heretofore there has been and still is little choice, since we have not provided the variety of accommodations that would have made this possible.

Psychologically, most of us seem to deny the possibility of any further change beyond the point when we feel ourselves to be mature and well established. On the one hand, remaining in the same living accommodations represents, probably subconsciously, a denial of age. When we remember the generally sorry implications old age

has had for some people this is not surprising. On the other hand, the resistance to change represents a strong emotional tie to the neighborhood, to the community, to vestiges of the family, and an attempt to preserve intact those things that have fulfilled basic psychological needs. Although we may perhaps expect this feeling, especially toward the community, to lessen in the coming generations of aged persons who will have been more mobile and unrooted, the fundamental needs for a favorable self-image will undoubtedly persist. On the basis of this, it may be safe to say that any housing accommodations must satisfy basic psychological and spiritual needs as well as the practical and everyday needs of the aged person.

For the professionals concerned with these problems, there is the challenge, first of all, of accepting wholeheartedly the concept that age and change are normal features of life, and then working to provide the variety of accommodations and services that will make this a comfortable as well as a natural state of being.

Conclusion

If we accept the premise that we cannot immediately accommodate all the nation's aged persons, where should we begin and what is most important? "To provide safe and decent housing" is not enough. We need to stop thinking in purely fragmentary terms of housing per se, medical services per se, or economic welfare per se; all these problems are closely inter-related. Our goals, rather, should be to insure a healthy, meaningful, and independent life for the nation's aged population. Especially designed housing is only part of the answer. In the purely physical sense, housing is like a therapeutic or rehabilitative device, which, when used alone and without proper sociological and psychological environment, can have only a limited effectiveness. Conversely, an otherwise healthy, happy, and well-adjusted person could easily lose this state of being without such a device to help in maintaining his effectiveness in the performance of day-to-day activities. Housing accommodations as such do play an important role, but they should not be regarded as an end. They are, rather, one of the means to a broader end. They must be thought of within the framework of a total environment. Excellent accommodations that are poorly located, in the wrong neighborhood, or without proper community facilities or with ill-conceived or unthinking management policies would obviously represent both a waste of money and a completely thoughtless approach to the problems of housing. In this connection we might profitably look to the physically disabled and handicapped for an illustration of the importance of the home situation and mental outlook to happiness, to health, and to the ability to lead meaningful and purposeful lives.

(For bibliography of article, see page 384.)

Special Report

The Problem of Disability Arising from Neglected Trauma

J. Francis Silva, F.R.C.S., F.I.C.S., F.A.C.S.

Introduction

MAN'S CRAVING for speed and more speed has, with the satisfaction of those desires, left in its wake a rise in the number of accidents, which have been on the increase where all forms of transport are concerned. Similarly the mechanisation of industry with more and

Dr. Silva presented this report August 30, 1960, during the Eighth World Congress of the International Society for the Welfare of Cripples, convening in New York City. He is affiliated with the orthopedic department, General Hospital, and the Crippled Children's Aid Association of Colombo, Ceylon.

elaborate equipment has resulted in large numbers of industrial accidents.

To cope with this increase of accidents the medical world has kept pace in the form of advancement of surgical technics, the progress of chemotherapy, and, last but not least, the organization of suitable accident services to meet the 24-hour supply of all forms of trauma. In this field of surgery, ancillary services have kept pace in no uncertain terms. Physiotherapy, occupational therapy, prosthetic services, and rehabilitation, each in its different sphere has kept up with the progressive demands made on them.

The goal of all concerned in this development has been the reducing of disability among the injured to a minimum in very serious and complicated cases and the avoidance of disability when the original injury is less serious.

Another factor in the existence of such an adequate orthopaedic accident service is that the loss of working hours of the personnel injured is reduced to a bare minimum. The absence of such an organization is both an economic and a social problem to the country concerned.

In the Eastern Hemisphere the problem of speed in transport did not exist in the time of our forefathers. Traveling in a leisurely fashion in a bullock cart or rickshaw was speed enough. When a little more speed was demanded, a coach and horse was considered to be very fast. Industrialization in an agricultural country was under-

developed, and under these circumstances the lack of an organized service was not missed as the number of cases was few.

The Indigenous System of Medicine

Coping with the treatment of trauma in most Eastern countries has been an ancient system of medicine, at its highest about the time of Alexander the Great. It came to Ceylon about 161 to 137 B.C. (Silva 1958). These methods consisted of manipulative reduction of fractures and dislocations followed by simple splintage, using barks of certain trees incorporated in the splint. The trees used are *Crataeva roxburghii*, *Ficus glomerata*, *Morinda tinctoria*, and *Morinda citrifolia*. This was followed by the use of a paste of roots of such trees as *Gmelina asiatica*, *Cassia auriculata*, and *azadirachta indica*. This paste is supposed to cure limitation of movements. The system no longer flourishes as it did several centuries ago; what exists today is a form of organized quackery. Most of the indigenous practitioners now have but a smattering of the knowledge of the past. They have had the good fortune to by chance come across some of the writings of the masters. Unfortunately blind faith and ignorance persist amongst the villagers who would go to these practitioners before seeking Western treatment. Combine this practice with the lack of organized orthopaedic accident services and modern developments of road transport and industrialization, and the problem of disability would indeed be colossal.

The Sources of Disability

This then could give an idea of the magnitude of our problem, for no clinic would go without seeing three to six cases of malunited fractures or unreduced dislocations, not to speak of untreated nerve and tendon injuries and Volkmann's ischaemic contracture. Disability in these cases is due to impaired function of a limb. This may be caused by such things as marked shortening, angulation, blocking of joints, or incongruity of joints. These changes are followed quickly by traumatic arthritis, which adds to the misery and hardship of the unfortunate person.

The answer to the problem is usually surgery, but how much can we afford these neglected cases? What is the

reduction in the disability the patient can expect and how often are surgical procedures justified? The patients are in severe pain due to malposition of fragments often ununited for several months. There may be marked shortening of the limb, even two to three inches. When united, the fragments are often angulated or rotated producing gross incongruity of joints and marked restriction of movements. Even limited movement is associated with considerable pain. Myositis ossificans is not infrequently associated with this maltreatment and when present confronts the surgeon with added problems. The pathological change is probably due to excessive massages with the oils mentioned earlier. Further neglect of these patients results in their developing a traumatic arthritis of the joints, adding to the already present misery and hardship. Victims have thus undergone suffering of both mind and body for several months, losing their earning capacity and depriving the country of their contribution toward economic progress.

The problem in these cases is indeed gigantic. What is the reduction in disability the patient can expect and how often are surgical procedures justified? This ancient system of medicine is not a standardized one. The same types of fracture may have gotten diverse forms of treatment, making every case an individual problem. There can be no standard treatment of every neglected case.

Campbell (1956) states that "surgery is rarely justifiable for cosmetic reasons alone." But there is more to it than this in a conservative Eastern country where a disability or deformity is regarded as a blemish. The answer is as yet unresolved. That which is available to these unfortunates to alleviate their suffering lies in open reduction of fractures with internal fixation and open reduction or arthroplasty of joints. A stiff joint is not very well looked upon and thus makes arthrodesis unpopular.

The diverse problems are often difficult to solve. In the upper extremity, severe disability is caused by unreduced dislocations of the shoulder, unreduced or ununited fractures of the humerus, dislocation and fracture-dislocation of the elbow, and unreduced fractures of both bones of the forearm with Volkmann's ischaemic contracture. In the lower extremity unreduced dislocation of the hip, fracture of the neck and shaft of the femur, fracture of the patella, and fracture of the tibia present difficult problems.

Discussion of Some Problem Cases

The grave problems that have been just discussed are amply illustrated by a cross section of our cases described below in an endeavor to demonstrate our difficulties in restoring to useful function limbs apparently deformed for life.

Case 1.—P.A.C. (age 45) had had a fall four months prior to being seen in our department. X-ray examination revealed an anterior dislocation of the right hip joint

with the head impacted in the obturator foramen. Open reduction was done. The patient is back at work on a rubber plantation 1½ years after the operation.

Case 2.—W.M.T. (age 28) presented a fracture of the shaft of the femur one month old. There was shortening of the leg with angulation of the fragments. Open reduction of the fracture was done with internal fixation of the fragments using a Küntscher nail. The patient made an uneventful recovery.

Case 3.—W.A.D.C. (age 28) reported with pain and swelling of the left knee of six months' duration. Clinical and radiological examination revealed an ununited fracture of the patella with wide separation of the fragments. Excision of the patella and repair of the quadriceps mechanism gave an uneventful recovery.

Case 4.—B.D.A.H. (age 36) reported eight months after a fracture dislocation of the left shoulder. He also had a traction lesion of the brachial plexus. The shoulder joint was repaired using an upper humeral acrylic prosthesis. This was followed by three weeks in an abduction frame. An intensive course of rehabilitation subsequently gave him a useful functioning arm.

Case 5.—G.E.S. (age 55), in our most outstanding case, had sustained a midshaft fracture of the left humerus 20 years before. He had a complete pseudoarthrosis at the fracture site with wide separation of fragments. At operation there was a complete capsule with synovial fluid at the fracture site. This was excised with the sclerosed bone ends. Onlay grafting with bone chips to fill the defect was done resulting in union of the fracture at long last.

Case 6.—W.B. presented a case of unreduced dislocation of the shoulder of 1½ months. An open reduction gave good results.

Cases 7 and 8.—These are two of a large series of unreduced dislocations of the elbow, treated long after injury. We did lower humeral acrylic arthroplasty in these cases, as the joint had been completely destroyed. The functional results after operation are indeed encouraging and the patients have been able to go back to work. They have all gained a good range of flexion and extension. Pronation and supination seem to be more difficult to attain but the range has been encouraging. Old dislocations of the elbow are a great problem in this country; there are over 75 cases of open reduction and arthroplasty in the department.

These cases show a cross section of the problem arising from neglected trauma, a major problem in the field of orthopaedic surgery in this country. Results of our efforts so far have been encouraging but what is needed is more health education and social work to enlighten the public, thus bringing patients in for early treatment.

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Book Reviews

881

Cerebral Palsy in Denmark; A Discussion of Its Occurrence, Disease Types, Etiology and Social Aspects, Based on a Material of 2,621 Patients Born in the Period 1925-1953.

By: **Erik Hansen**; translated from the Danish by Harry Cowan

1960. 148 p. figs., tabs. Paperbound. (*Acta Psychiatrica et Neurologica Scandinavica. Suppl. 146. v. 35*) Ejnar Munksgaard, Publisher, 6 Norregade, Copenhagen, Denmark. D. kr. 22.

THIS VERY detailed nationwide study of the incidence, geographical distribution, differential diagnosis, classification by type, associated handicaps, intellectual status, etiological factors, and treatment of cerebral palsied persons born between 1925 and 1953 in Denmark was carried out with the assistance of the Danish Society for the Welfare of Cripples. The author compares his findings with those of similar studies reported by authorities in other countries, as well as in Denmark. Of the group studied, 47.7 percent were estimated to have normal intelligence; average birth incidence of the condition was found to be 1.3 per 1,000 births. Incidence of associated epilepsy was 22.2 percent. Compared to the general population, findings showed a preponderance of mothers aged 35 or over, a small but definite preponderance of firstborn, and a preponderance of twins, prior abortions, and stillbirths, in certain classified groups. Low birth weight, abnormal birth, and neonatal cerebral symptoms also appeared to be related to etiology. An interesting finding was that a majority of patients in the disease group, spastic monoplegia and paraplegia, were born during the last quarter of the year, a feature more pronounced when birth weight is under 2500 grams.

882

Conference Proceedings, Golden Anniversary White House Conference on Children and Youth, March 27-April 2, 1960, Washington, D.C.

By: **White House Conference on Children and Youth**

1960. 429 p. Paperbound. National Committee for

Children and Youth, Suite 411, 1145 19th St., N.W., Washington 6, D.C. \$2.25.

THE PROCEEDINGS contain background information on the history and organization of the Conference, the program plan and schedule of events, list of participants and exhibitors, and abstracts of speeches given at general assemblies and 17 forum sessions, as well as summaries of recommendations made in each. A composite of forum recommendations (670 in all), including those pertaining to handicapped children, is indexed. The Conference did not attempt to establish priorities among unmet needs of children and youth; rather, participants sought to suggest a variety of formats for citizen action.

883

Early Identification of Emotionally Handicapped Children in School

By: **Eli M. Bower**

1960. 120 p. forms. (*Am. Lecture ser., publ. no. 404*) Charles C Thomas, Publ., 301-327 E. Lawrence Ave., Springfield, Ill. \$5.50.

SIX YEARS' research involving over 40,000 children and 271 teachers in California's public schools is reported along with effective screening procedures that can be used in identifying emotional disturbance and in preventing personality and behavior disorders. Results of the large-scale research study demonstrate conclusively that teachers *can* identify such children through the use of information ordinarily available in the classroom. Practical application of the class procedures is discussed in detail, defining differences between children with somewhat deviant behavior and those who exhibit actual emotional handicaps. Five specific characteristics of emotionally handicapped children, when present in marked degree over a period of time, set them apart from children who are able to handle their problems in a normal way.

The testing instruments, rating scales, and teacher work sheets included in the appendix are still being revised; information on the availability of new instruments can be obtained from Educational Testing Service, 20 Nassau St., Princeton, N.J., or from the California State Dept. of Education, Sacramento 14, Calif.

380

REHABILITATION LITERATURE

884

Farewell to Fear

By: Tomi Keitlen (with Norman M. Lobsenz)

1960. 286 p. illus. Published by Bernard Geis Associates; distributed by Random House, 457 Madison Ave., New York 22, N. Y. \$3.95.

IN THE PAST five years since Mrs. Keitlen lost her sight at the age of 33, she has become an expert skier, fencer, mountain climber, and photographer, plays golf in the low 90's, rides horseback, travels extensively with her Seeing Eye dog, Duchess, and, if that were not enough, manages successfully the Physical Fitness Institute in New York City. She is much sought as a lecturer and serves as educational advisor to the Anti-Defamation League of the B'nai B'rith. She has found no happy compensations for blindness but has accepted it as a handicap to outwit. How she reorganized her way of life and learned, often by trial-and-error methods, how to live actively and normally is a fascinating account of what the human mind and spirit can accomplish.

885

Handicrafts and Hobbies for Recreation and Retirement

By: Marguerite Ickis; with drawings by Miriam F. Fabbri and Dr. Michlos Foghtuy

1960. 276 p. illus. Dodd, Mead & Co., 432 Park Ave., South, New York 16, N.Y. \$4.00.

THE LATEST of Miss Ickis's books on arts and crafts activities and hobbies for profit or pleasure provides basic technics for working with wood, metal, leather, clay, paper, textiles, and plastics. The instructions are, in some instances, rather limited (perhaps to whet the appetite for more detailed directions?); references are kept to a minimum and included in only a few chapters. However, since the book's purpose is to suggest a wide variety of recreational interests, Miss Ickis succeeds in capturing the imagination. Her long experience as a crafts and recreation instructor has acquainted her with the new and unusual hobbies and ways of enlarging on old favorites. She is the author of *Arts and Crafts; A Practical Handbook*, published by A. S. Barnes in 1943, and *Pastimes for the Patient*, published in 1945, as well as *Folk Art and Crafts* (Association Pr., 1957).

886

Handicrafts for the Homebound Handicapped

By: Mildred Kroll Rich, Ed.D.

1960. 104 p. illus. Charles C Thomas, Publ., 301-327 E. Lawrence Ave., Springfield, Ill. \$5.50.

SELECTED BY HANDCRAFT teachers of the homebound in New York City, the 30 craft projects described and illustrated here have been found useful with children from 6 to 21 years of age. Projects are classified according to suitability for persons with specific types of impairment resulting from poliomyelitis, cerebral palsy, muscular dystrophy, multiple sclerosis, rheumatoid arthritis, and Oppenheim's disease. Instructions for each include a list of the necessary supplies and tools and suggested variations in construction. A bibliography, list of supply houses, and an index are additional aids for teachers and therapists who will find practical use for the guide. It is suitable also for parents' needs in devising leisure time activities for the homebound.

887

Mental Retardation in Infants and Children

By: Abraham Levinson, M.D., (deceased) and John A. Bigler, M.D.

1960. 308 p. figs., tabs. Year Book Publishers, Inc., 200 E. Illinois St., Chicago 11, Ill. \$8.00.

BASED ON the results of evaluation and study of many hundreds of children seen in private practice and in hospitals, this book is intended to inform practicing physicians on the causes and types of mental retardation, diagnostic tests, clinical management, parent counseling, and the medical, psychological, and educational problems that must be met. Material for the book was originally gathered by Dr. Levinson before his death; in preparing the data for publication, Dr. Bigler has added his own knowledge and experience in the field, in order to include newer concepts. It is their belief that mental retardation is due to brain disorder; from this premise they proceed to a discussion of the medical problem and the associated symptoms that may be benefited by treatment. Dr. Bigler is a practicing pediatrician and head of the Department of Pediatrics, Northwestern University Medical School. Dr. Levinson specialized in pediatric neurology and served as director of the Dr. Julian D. Levinson Research Foundation of Cook County Hospital, Chicago, until his death.

888

Mental Retardation; Proceedings of the First International Medical Conference at Portland, Maine

Edited by: Peter W. Bowman, M.D., and Hans V. Mautner, M.D.

1960. 530 p. figs., tabs. Grune & Stratton, Inc., 381 Fourth Ave., New York 16, N.Y. \$12.50.

NEARLY 100 MEDICAL scientists and practitioners from 30 countries participated in the Conference held in July, 1959, the first of its kind on an international

BOOK REVIEWS

basis. Sessions were devoted to papers on relation of anatomical and physiological conditions to mental deficiency, abnormal behavior manifestations in the brain-damaged, metabolic causes of mental deficiency, mongolism and its etiology, role of the neurosurgeon in treatment of the mentally retarded child, childhood schizophrenia, and relation of child psychiatry to the field of mental retardation. The book offers a review of research findings of current interest. Bibliographies follow each paper; discussions occurring at the conclusion of each session are included, as well as a general subject index.

889

New York University Workmen's Compensation Study

By: Center for Rehabilitation Services, New York University

1960. 269 p. tabs. New York University Center for Rehabilitation Services, 342 E. 26th St., New York 10, N.Y. \$6.50.

THIS STUDY is the first to be published by a new unit of New York University—the Center for Rehabilitation Services—established to promote interdisciplinary co-operation in rehabilitation work and to assist in the development of basic research in biological, physical, psychological, and social areas essential to services to the handicapped. Specific problems of patient care, educational methods, or community services will be studied and analyzed. The current study of workmen's compensation as it operates in New York attempted to determine how effective rehabilitation care could be made available, promptly, to claimants. Legislative and administrative changes necessary to establish a practical system for achieving maximum results were considered. Thirteen recommendations for improving the quality and scope of rehabilitation services for injured workmen in New York are included. The main body of the report is contained in the first 83 pages of the book; the remainder is appended material covering background information on the New York statute, previous investigations of the system, legal authority and services of the Division of Vocational Rehabilitation and the Department of Labor's selective placement program, rehabilitation facilities available, provisions of statutes in other states, data in regard to medical personnel and policies, and rehabilitation experiences under the law.

890

The Objectives and Functions of Occupational Therapy

Compiled by: American Occupational Therapy Association

1958. 153 p. Spiral binding. Paperbound. Wm. C. Brown Book Co., 135 S. Locust St., Dubuque, Iowa. \$2.50.

SET UP IN OUTLINE form, this manual affords a concise review of the treatment objectives, procedures, and functions of occupational therapy in the major diagnostic areas of service—physical disabilities, psychiatry, pediatrics, general medicine and surgery, and tuberculosis. Eleven functions of the therapist are defined in Section I; Section II discusses how and where they are applied in relation to the patient, physician, members of the occupational therapy staff, other departments, and the community. A synthesis of treatment objectives in specialty areas and a section covering specific conditions, their clinical symptoms and treatment, provide an excellent guide for the administrator or instructor of students. The manual was compiled under the direction of the Association's Committee on Clinical Procedures.

891

Occupational Diseases and Industrial Medicine

By: Rutherford T. Johnstone, M.D., and Seward E. Miller, M.D.

1960. 482 p. figs., tabs. W. B. Saunders Co., W. Washington Square, Philadelphia 5, Pa. \$12.00.

THIS TEXTBOOK, useful in orienting students and teachers to the field of industrial medical practice, covers, in Part I: duties of the industrial physician, scope of industrial medicine, role of ancillary personnel in the industrial health service, insurance programs and workmen's compensation, psychosomatic illnesses in industry, rehabilitation of the disabled, and diagnosis of occupational diseases. Part II discusses specific occupational diseases caused chiefly by chemicals, dust, infections, and the effects of various physical agents. A glossary of some industrial terminology and a subject index conclude the text. Case history material is used extensively in illustrating the problems encountered in treatment of industrial injuries and diseases.

892

Occupational Therapy Reference Manual for Physicians

Compiled by: American Occupational Therapy Association (under the editorship of Marguerite Abbott, O.T.R.)

1960. 111 p. forms. Spiral binding. Paperbound. Wm. C. Brown Book Co., 135 S. Locust St., Dubuque, Iowa. \$2.50.

BASIC PHILOSOPHY and procedures of occupational therapy have been compiled by a group of specialists in the profession to enable physicians to understand and direct this aspect of treatment in the rehabilitation of patients with physical and mental disabilities. Functions and scope of therapy are defined, as well as the respective roles of the physician and therapist. Clinical procedures

and basic treatment criteria are outlined for specific conditions. Additional information includes a section on the prevocational aspects of occupational therapy, educational requirements for therapists and a list of schools offering approved courses, aims and services of the national organization, and a selected list of reference material. Practicing therapists, teachers, and students should find the manual equally useful.

893

Prosthetics International; Proceedings of the Second International Prosthetics Course, Copenhagen . . . July 30 to August 8, 1959

By: **Committee on Prostheses, Braces and Technical Aids, International Society for Rehabilitation of the Disabled**

1960. 188 p. figs. Paperbound. International Society for Rehabilitation of the Disabled, 701 First Ave., New York 17, N.Y. \$2.00.

SIMILAR IN CONTENT to the First International Course in Prosthetics, held in 1957, the second offered lectures, demonstrations, and discussions on current prosthetic devices, their manufacture, and fitting; throughout the courses the team concept in programs for the physically handicapped was stressed.

Contents: International prosthetics and the International Society for the Welfare of Cripples, Donald V. Wilson.—Introduction, Knud Jansen.—The team approach, D. S. McKenzie.—Psycho-biological problems of the forearm and hand, Norman Capener.—The results of the electromyographic tests carried out on patients after amputations, Marian A. Weiss.—Biological and biomechanical principles in amputation surgery, Henry E. Loon.—Stump correction by muscle-plastic procedure, Robert Dederich.—Preprosthetic and prosthetic training, Bodil Eskesen.—Three lectures, Thomas J. Canty.—On hemipelvectomy and interscapulothoracic amputation, Arne Bertelsen.—Fitting the plastic socket for hemipelvectomy, Erik Lyquist.—Management of the knee disarticulation; Amputation, frequency and cause, Knud Jansen.—Relationship of socket shape to anatomy and biomechanics; Prosthetic management of the proximal A-K amputations; Types of below knee prostheses and components; Simplified artificial limb, William A. Tosberg.—Considerations on amputation on the child; Multiple handicaps, D. S. McKenzie.—Prosthetics in geriatrics, Arne Bertelsen and G. Rønn.—Rational basis for prescription of upper extremity prostheses, Knud Jansen.—Upper extremity prostheses, O. Hepp and G. G. Kuhn.—Technical aids, an important part of the rehabilitation scheme, Karl Montan.—Literature (bibliography).

DECEMBER, 1960, Vol. 21, No. 12

894

Report on Rehabilitation of Chronically Ill and Disabled Persons in San Francisco

By: **Community Health Services Committee, Health Council of the United Community Fund of San Francisco** (Prepared by Irving Babow, Ph.D., Staff Research Consultant)

1960. 161 p. tabs. Mimeo. Paperbound. United Community Fund of San Francisco, 2015 Steiner St., San Francisco 15, Calif.

THIS IS THE FOURTH, and final, report of a health and rehabilitation survey of the needs of the chronically ill, disabled, and the mentally retarded of San Francisco, the health problems of the aged, and the community resources available for meeting their respective needs. It includes a wealth of statistical information on estimates of persons with varied handicaps, medical and educational services provided handicapped children, groups served by a selected list of rehabilitation facilities in the area, and doctors' estimates of unmet needs. Guidelines useful in community rehabilitation planning for handicapped children and major recommendations of the Community Health Services Committee are given. For reference to the report by doctors, see *Rehab. Lit.*, July 1958, #801.

895

The Role of the Physician in Environmental Pediatrics

By: **Carl C. Fischer, M.D.**

1960. 122 p. graphs. Landsberger Medical Books, Inc., 51 E. 42nd St., New York, N.Y. \$5.50.

DR. FISCHER, Head of the Department of Pediatrics, Hahnemann Medical College and Hospital, Philadelphia, has gathered together a number of short lectures developed in the course of his teaching and intended for the junior medical student. Too often, he believes, the average physician has little understanding of sociopediatric problems and how they should be dealt with in the community, a subject that should receive attention in the medical college curriculum. The physician's responsibility in accident prevention, adoptions, the school health program, and toward the child with a handicap and adolescent is reviewed. Careers in the field of pediatrics are considered briefly.

896

Seeing Eye Wife

By: **Virginia Blanck Moore**

1960. 177 p. Chilton Co., Book Division, 56th and Chestnut Streets, Philadelphia 39, Pa. \$2.75.

ALTHOUGH the author's husband is, in his own words, "blind as a bat," Mrs. Moore, who had once said she would "never marry a blind man," has found their life together much like that of the normal couple. Her husband works, they have a son, a mortgaged home, and a secondhand car! Blindness, for Bob, is an inconvenience but this is more easily borne than the lack of understanding of blindness shown by the ordinary man on the street. As an industrial placement agent for the Iowa Commission for the Blind, Bob uses every opportunity to challenge the prejudiced notion that the blind are basically different from the sighted. Mrs. Moore's intimate knowledge of the problems of the blind and how they can be overcome is skillfully woven into the personal account of their own experiences, told with warmth and humor.

897

Speech Disorders and Nondirective Therapy; Client-Centered Counseling and Play Therapy

By: Robert F. Hejna, Ph.D.

1960. 334 p. Ronald Press Co., 15 E. 26th St., New York 10, N.Y. \$6.50.

SPECIFIC PROCEDURES of nondirective play therapy and client-centered counseling to be used with children, adolescents, and adults whose speech problems may reflect personality maladjustment are offered as a supplementary approach to speech therapy. The author presents extensive transcripts from his own practice to illustrate the technics in actual use. In his experience, these procedures can bring to light underlying difficulties, after which more conventional therapy may be used. The concept of treating the whole person, stressed in all forms of rehabilitation, is recognized. In the atypical child or adult, the problem goes beyond the recognizable speech difficulty; often direct speech technics are of no avail. Practical suggestions on relationships with parents, limits of permissiveness in play situations, and structuring initial interviews with older clients are included. Dr. Hejna, a speech pathologist, has also published a developmental articulation test and a parent handbook on children's speech problems. (See *Rehab. Lit.*, April, 1956, #448 and 451.) He is currently director of the speech and hearing clinic and assistant professor of speech at the University of Connecticut, Storrs, Conn.

(Continued from page 377.)

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Tibbitts, Clark. *Handbook of Social Gerontology*. Chicago: University of Chicago Pr., 1960.

Digests of the Month

Journal articles, chapters of books, research reports, and other current publications have been selected for digest in this section because of their significance and possible interest to readers in the various professional disciplines. Authors' and publishers' addresses are given when available for the convenience of the reader should he desire to obtain the complete article or publication. The editor will be most receptive to suggestions as to new publications warranting this special attention in Digests of the Month.

898

The Variety and Extent of Problems Requiring Rehabilitation

By: Herbert W. Park, M.D. (*Director, Baruch Center of Physical Medicine and Rehabilitation, Medical College of Virginia, Richmond, Va.*)

In: *Proceedings of the Fifth Annual North Carolina Conference on Handicapped Children, Devoted to Rehabilitation of the Physically Disabled*, p. 18-23, edited by William P. Richardson. 1960. 82 p. n.p., The North Carolina Health Council.

THE FACT that in modern medicine death is being converted to long-term illness and to disability in increasing numbers is the very basis for the heightening interest in the general concepts of rehabilitation. Sound practice of acute medicine and surgery by the individual physician is probably the greatest single factor contributing to this national dilemma.

Medicine has been and continues to be taught on the basis of rugged individualism. Schools foster the attitude of "I know more than anyone else." The extensive increase in scientific knowledge of the body and its disorders has necessitated medical specialties and subspecialties and led to the partitioning of the patient into organ systems, especially in medical teaching centers—the environment of our students.

At the Medical College of Virginia Hospitals we are nicely geared for the management of short-term illness. The flow of patients is very large, for the average stay is under 12 days, although more than one-fourth of the bed utilization time on the major and surgical services is for long-term illness. Interest in the long-term patients—considered to be "crocks"—wanes rapidly as soon as the diagnosis is made and/or specific treatment rendered. Their not recovering to a normal state is forgotten in the tendency to pass to more interesting, active cases. It was learned that less than 5 percent of these cases were served by other than physician and nursing services (most commonly by the social service department for discharge purposes). Patients were being discharged to home or nursing home, dependent, with a significant residual disability or chronic disease. Planning for the future was limited.

Medical teaching centers are unwittingly contributing to a situation wherein: (1) an undesirable attitude is

held by medically oriented personnel as to long-term patients, (2) a significant number of persons are born with or develop handicapping disability and chronic disease before age 16, and (3) the total of chronically ill and disabled returned from the medical teaching center to the community is exceedingly high.

When I had a fire in my home, I closed off the area, called the fire department, and got my family out of the house. Later my house was cleaned thoroughly and the primary area of damage rebuilt. I called in specialists for the patient, my home. I did not need training as a fireman, cleaning man, contractor, carpenter, plumber, electrician, or insurance adjuster. I had to have faith in the others. The fire department did not "rehabilitate" my home nor the contractor do the general planning—the person who knows the home best is responsible for the end result. This has direct application to problems of medical rehabilitation, how it should be taught and practiced.

Fundamental in effective recovery are the family physician and his relationship to his patient. He knows his patient's ecology. Only when he is informed and can effectively carry out planned management in long-term illness will the trend for mounting numbers of such patients change significantly. Teachers must be re-educated in approach to patient care. Rehabilitation concepts must be ingrained in students throughout schooling and must be a basic course in preparing for general practice.

The criteria for establishing special work units includes: (1) Recognition and identification of disability problems in sufficient number to warrant establishment of special efforts. (2) Location of interested medical personnel and knowledge of appropriate medical treatment that will significantly alter the prognosis of the disorder process. (3) Sufficient financial backing for an effective program.

At the Medical College of Virginia we have a strictly experimental undertaking, not fully accepted by community and medical school but sufficiently successful to report. Any staff physician of the Medical College of Virginia Hospitals can admit or transfer rehabilitation patients to a 100-bed facility. Directly associated with the Center are nonphysician, investigative, and treatment services that may be prescribed. These include nursing, dietetics, psychology, physical therapy, occupational therapy, audiology, speech, orthoptics, chaplain, volunteer special

education, social work, and vocational rehabilitation counseling. The primary purposes of the Baruch Center are: to provide rehabilitation-oriented nursing units for non-acute illness, to hasten effective planned discharge in the slower hospital cases, and to serve as an admission point for those needing rehabilitation services only. The present building, built in 1902, is limited in physical changes possible, and intercommunication is difficult. Special ward areas are for alcoholic rehabilitation and for the severely burned. The other beds are for general problems. I hope to see a new physical facility erected designed to serve the needs. Such a unit is an excellent resource in teaching students of medicine and related disciplines. Patients remain long enough for students to make careful evaluation and participate in planned management and treatment.

The planned management of long-term illness and handicapping disabilities through to a realistic end point is the concern of all physicians, especially the family physician, whose relations to the patient must be supported and strengthened by proper teaching, consultation, and information. Special facilities to assist in care of such patients are a definite need. Facilities should be located adjacent to or as part of the community medical center. Since vocational retraining of disabled people concerns educators, highly specialized units are needed where medical management can be continued and co-ordinated within an educational program. Rehabilitation is as broad as medicine itself and as deep as the imagination of those who work in it. I am convinced this is the greatest challenge to modern medicine in our time.

899

Rehabilitation—A New Dimension in Medicine

By: Robert D. Wright, M.D. (*Assistant Director for Health and Medical Activities, Office of Vocational Rehabilitation, Department of Health, Education, and Welfare, Washington 25, D.C.*)

In: *J. Med. Education*. October, 1960. 35:10:976-980.

I PROPOSE that in rehabilitation is found an area of medicine that, if properly developed, can contribute a new kind of patient-doctor relationship that might be as important to our professional growth as the contributions of Hippocrates and Osler.

I have been practicing and teaching preventive medicine, in which to get things done community organization is needed, rather than the traditional one-to-one, patient-doctor relationship we learn in student days. However, in all disease control programs one element becomes more important to the physician who cares for one patient at a time—management. In health care the division of labor has grown so great that, unless the practicing physician thinks of himself as a *managing* physician, we face the

prospect of such fragmentation of the healing art that the patients themselves, through their leaders, could well take desperate and misguided steps to bring order out of chaos.

For eight years I had been teaching this concept, but not until, on Sept. 1, 1959, I became Assistant Director for Health and Medical Activities for the Office of Vocational Rehabilitation, did I feel the full impact of its meaning. I am the first physician to hold that position or any position of comparable authority in this program. The OVR program, which now spends almost \$100 million annually, began in 1920, first as a program of special education to retrain disabled war veterans. Congress did not appropriate funds for medical rehabilitation until World War II. Sums remained small until 1954. Now research and training costs alone amount to \$12 million a year; however, a rehabilitated worker pays more in taxes on the average in four years than it costs to rehabilitate him. To keep a worker on relief for one year costs as much as to rehabilitate him.

Last year the program returned 81,000 workers to competitive employment. National health surveys indicate there are over 2½ million disabled, possibly 2 million of whom could benefit from vocational rehabilitation. About 250,000 are disabled yearly, 88 percent by chronic disease.

With the aging of our population the problems of chronic disease are rapidly taking precedence over those of acute disease. The difference in proper management of the two types of disease is especially apparent in rehabilitation phases of management of a chronic disease that has resulted in a substantial disability. This kind of case exemplifies the division of labor in health care that threatens to produce low-grade care if each fragment is allowed to impress itself on the patient without the proper co-ordinating force to assure that the individual therapies are additive and not antagonistic. This problem appears throughout medicine's structure. In all paramedical disciplines concerned with a case, most or some of the members work as individual entrepreneurs establishing a one-to-one relationship without supervision or control by physicians, who are, after all, the only professionals trained to consider the whole person.

In the restoration of a severely disabled person to social function the co-ordinator is too often the patient himself, unless he is eligible for the services of vocational rehabilitation or he is fortunate enough to be in the hands of a physician who thinks of his relationship to the patient both as one-to-one and as part of a many-to-one, *with himself the captain of the many*. With vocational rehabilitation the co-ordinator will ordinarily be a vocational rehabilitation counselor. Under our program the vocational counselor is the *pivot person*, making the final decision whether the agency will spend money for medical

(Continued on page 398.)

Abstracts of Current Literature

This abstracting section, together with other numbered references indexed in this issue, serves as a supplement to the reference book *Rehabilitation Literature 1950-1955*, compiled by Graham and Mullen and published in 1956 by the Blakiston Division of McGraw-Hill Book Company, New York. An author index will be found on the last page of the issue.

AMPUTATION—EQUIPMENT

See 893.

APHASIA

900. Wepman, Joseph M. (950 E. 59th St., Chicago 37, Ill.)

Studies in aphasia; background and theoretical formulations, by Joseph M. Wepman (and others). *J. Speech and Hear. Disorders*. Nov., 1960. 25:4:323-332.

A paper read at the International Association of Logopedics and Phoniatrics in London in 1959, reporting on collaborative research by the Speech and Language Clinic, University of Chicago, and the Psychometric Laboratory, University of North Carolina. The authors review briefly important early neurological theories forming the basis for current emphasis on therapy for aphasia. Their current theory holds that aphasic disorders are disruptions in the symbolic language process. Implications of the theory to operational diagnosis and to therapy planning are noted. Direct training procedures for agnosias and apraxias are contrasted with the indirect stimulative approaches found useful for the aphasias. 19 references.

APHASIA—DIAGNOSIS

901. Miller, Maurice H. (Downstate Med. Center, State Univ. of New York, 450 Clarkson Ave., Brooklyn 29, N.Y.)

Audiologic evaluation of aphasic patients. *J. Speech and Hear. Disorders*. Nov., 1960. 25:4:333-339.

Audiological evaluation of hemiplegic patients, with and without aphasia, supported the belief that there is a higher incidence of sensorineural impairments affecting the "speech frequency range" in left-hemiplegic, non-aphasic patients than in the right-hemiplegic, aphasic group. High-frequency sensorineural losses of hearing were found in a large majority of patients in the three groups. Subjects in this study tended to show greater threshold losses for speech than for pure tones. The drop in discrimination when subjects were tested in a background of noise may be related to disturbances in figure-background relationships, Dr. Miller believes.

ARCHITECTURE (DOMESTIC)

902. Netherlands Central Society for the Care of Disabled

Housing for the disabled. Amstelveen, The Netherlands, The Society, 1960. 46 p. illus., figs.

Specifications and room layout for homes adapted to the use of those requiring wheel chairs or crutches are discussed in this report originally published in Dutch.

Location, type of dwelling, structural adaptations, both indoors and out, special provisions for kitchen, bathroom, heating and plumbing facilities, financing and upkeep costs, and help available from government sources are covered. Data on the properties of floor coverings and wall finishes are given in the appendix.

Available in the English edition from the International Society for Rehabilitation of the Disabled, 701 First Ave., New York 17, N.Y., at 50¢ a copy.

See also p. 370.

ASPHYXIA

903. Keith, Haddow M. (Mayo Clinic, Rochester, Minn.)

Neurologic lesions in relation to asphyxia of the newborn and factors of pregnancy; long-term follow-up, by Haddow M. Keith and Robert P. Gage. *Pediatrics*. Oct., 1960. 26:4:616-622.

A follow-up on a study made in 1953 by Dr. Keith (and co-workers) in order to determine how many of the subjects of the earlier study had convulsions or other recognizable neurologic abnormalities. Findings reinforce conclusions of the previous study, that prolonged labor, asphyxia, or delayed respiration at birth did not cause any neurologic abnormality in children who survive the early months of life. Convulsions of any type are not believed to be more common among children who experienced difficulty at birth.

AUDIOMETRIC TESTS

904. Hopkinson, Norma T. (555 S. Negley Ave., #1, Pittsburgh 32, Pa.)

Instrumental avoidance galvanic skin response audiometry, by Norma T. Hopkinson, Jack Katz, and Herman Allan Schill. *J. Speech and Hear. Disorders*. Nov., 1960. 25:4:349-357.

Describes technics of a proposed method believed to be the simplest procedure for the use of instrumental avoidance training in the determination of auditory speech thresholds. Several modifications and variations are suggested and advantages and disadvantages of the method are pointed out. 41 references.

BLIND—BIOGRAPHY

See 884; 896.

BLIND—ETIOLOGY

905. Hurlin, Ralph G. (1790 Broadway, New York 19, N.Y.)

1960 revision of the Standard Classification of the

ABSTRACTS

Causes of Blindness. *Sight-Saving Rev.* Fall, 1960. 30:3: 153-156.

In the new revision of the Standard Classification, adopted by the Committee on Statistics of the Blind, National Society for the Prevention of Blindness, in September, 1960, no major changes have been made. Small adjustments in individual categories consist mainly of verbal changes to improve terminology. Combination of earlier separate categories has resulted in simplification of the scheme. The Society is preparing a handbook, soon to be available, with directions for using the classification. The revised scheme is included here.

BLIND—SPECIAL EDUCATION

906. Murphy, Albert T. (332 Bay State Rd., Boston 16, Mass.)

Attitudes of educators toward the visually handicapped. *Sight-Saving Rev.* Fall, 1960. 30:3:157-161.

Essentially the same material that appeared in the author's earlier article (see *Rehab. Lit.*, Oct., 1960, #773). Slight discrepancies will be found in the statistical tables as they appear here and in the article from *The Volta Review*; revision of tables is not mentioned.

See also 946.

BLIND—SPECIAL EDUCATION—U.S.S.R.

907. Dassanaike, Kingsley C. (*School for the Blind, Mt. Lavinia, Ceylon*)

Education of the blind in the U.S.S.R. *Internatl. J. Educ. of the Blind.* Oct., 1960. 10:1:5-8.

Describes the author's impressions of the system of education for the blind in Russia; the curriculum is the same as that followed by sighted children. There is no provision for nursery schools or schools for blind children with additional handicaps. Technical training is responsible for the high degree of co-ordination between education and future employment.

BRAIN INJURIES—DIAGNOSIS

908. Barsch, Ray H. (4356 N. Raymir, Wauwatosa 16, Wis.)

The concept of regression in the brain injured child. *Exceptional Children.* Oct., 1960. 27:2:84-89, 93.

More than 500 brain-injured children have been evaluated and studied in the Child Development Division of the Jewish Vocational Service, Milwaukee, during the past seven years. Regression has been recognized as an essential feature of adjustment problems in such children; 31 factors specifically implicated in precipitating some form of regression are included, illustrated by individual case records. A "sensitivity-continuum" is suggested as a means of evaluating sensitivity to stress and an aid in developing tolerance to stress in the child.

See also 965.

CAMPING

909. Hviid, Jorgen

The role of the camp in the rehabilitation process. *World Mental Health.* May, 1960. 12:2:86-94.

Describes the administration, activities, and results achieved in a summer camp in Denmark serving handicapped children, a few with emotional disturbances but no physical handicap, and a few so-called normal children. Results were considered significant from both a diagnostic and a therapeutic standpoint. The author believes the rehabilitation camp should not have to be restricted to the summer months but could serve all year round on a short-term therapy basis.

CEREBRAL PALSY

910. Cape Province Cerebral Palsy Association (S. Africa)

Proceedings of a conference on cerebral palsy, sponsored by the . . . (May, 1959); ed. by G. Beinart. *Mediese Bydraes.* June 4, 1960. 6:11:234-248.

An account of a week-end conference on cerebral palsy held in May, 1959, at the Cape School for Cerebral Palsied Children (15 Milner Rd., Rondebosch, Capetown, S. Africa) and featuring papers and demonstrations by Dr. Karel Bobath and Mrs. Berta Bobath. Clinical aspects, neuropathology, principles of the Bobath method of treatment, diagnostic aspects, orthopedic treatment, and the use of various therapies in cerebral palsy were discussed. Papers are summarized. A brief description is given of a suspension-type chair found useful at the School for children who have not achieved sitting balance.

911. Epstein, Ben (Pretoria, S. Africa)

Medical and educational problems of the brain-injured child. *S. African Med. J.* Sept. 10, 1960. 34:37:782-784.

Lists criteria for admission to cerebral palsy schools in South Africa, discusses sensory defects in the cerebral palsied child, with or without motor defects, and considers how brain injury affects the child's ability to learn.

912. Shere, Marie Orr (1009 W. Clark St., Urbana, Ill.)

The cerebral palsied child with a hearing loss. *Volta Rev.* Oct., 1960. 62:8:438-441.

Some generally accepted stereotypes in regard to personality characteristics of the cerebral palsied are refuted. Teachers especially should be aware of the high incidence of hearing loss among these children and its possible effect on behavior. Many techniques used in educating normal children, those with aphasia, or the hearing impaired are effective with the cerebral palsied. Parents should play an active role in the educational plan. Dr. Shere's article, presented at the 1960 Summer Meeting of the Alexander Graham Bell Association for the Deaf, was abstracted in the September issue of *Volta Review* (see *Rehab. Lit.*, Nov., 1960, #816).

See also 952.

CEREBRAL PALSY—DENMARK

See 881.

CEREBRAL PALSY—ETIOLOGY

913. Blumel, Johanna (Dept. of Surgery, Orthopedic Div., Univ. of Texas Med. Branch, Galveston, Tex.)

Genetic, metabolic, and clinical study on one hundred

cerebral palsied patients, by Johanna Blumel, G. W. N. Eggers, and E. Burke Evans. *J. Am. Med. Assn.* Oct. 15, 1960. 174:7:860-863.

Most impressive etiologic factors observed were prematurity (32%), anoxia (24%), birth trauma (13%), and developmental factors (11%), with 7% of the cases due to postnatal factors. A history of abortions was demonstrated in 30% of the families. An excess of patients with group A blood, though not justifying the assumption that more type A individuals are afflicted with cerebral palsy, suggests further research, should this trend continue.

CEREBRAL PALSY—MEDICAL TREATMENT

914. Swanson, Alfred B. (313 Blodgett Med. Bldg., Grand Rapids 6, Mich.)

Surgery of the hand in cerebral palsy and the swan-neck deformity. *J. Bone and Joint Surg.* Sept., 1960. 42-A:6:951-964.

Reconstructive surgery of the hand can benefit a selected group of cerebral palsied patients; in some, long-standing muscle imbalance can be improved only by surgical intervention. Arthrodesis, tenodesis, and tendon transfers were done in 12 such patients. Causes of the swan-neck deformity are analyzed, indications for surgery discussed, and surgical procedures evaluated.

CEREBRAL PALSY—PARENT EDUCATION

915. Thurston, John R. (2620 Fairfax Ave., Eau Claire, Wis.)

Attitudes and emotional reactions of parents of institutionalized cerebral palsied, retarded patients. *Am. J. Mental Deficiency.* Sept., 1960. 65:2:227-235.

Over 40% of the 610 parents or relatives of 372 cerebral palsied patients at the Northern Wisconsin Colony and Training School replied to a questionnaire survey using the Thurston Sentence Completion Form. As a group, parents revealed hostility, suspicion, depression, and general unease, interpreted as current parental maladjustment and unrest. More effective parental counseling appeared to be needed. Cerebral palsied subjects were those with severe mental retardation and gross neurological involvement.

CEREBRAL PALSY—PHYSICAL THERAPY

916. Bobath, K. (Western Cerebral Palsy Centre, John Roney House, 20 Wellington Rd., London, N.W. 8, England)

The effect of treatment by reflex-inhibition and facilitation of movement in cerebral palsy. *Folia Psychiatriae, Neurol. et Neurochirurg. Neerlandica.* Oct., 1959. 62:5:448-457.

An explanation of the neurophysiological basis of the principles upon which the "Bobath method" of treatment of cerebral palsy is founded. By inhibition or suppression of tonic reflex activity, a reduction or regulation of muscle tone can be achieved. Facilitation of the higher integrated righting and equilibrium reactions in their proper developmental sequence is followed by treatment to establish patterns of normal movements and skills.

CHILD GUIDANCE

917. Tallman, Irving (San Francisco State Coll., San Francisco 27, Calif.)

The emotionally disturbed child in the classroom situation, by Irving Tallman and Samuel Levine. *Exceptional Children.* Oct., 1960. 27:2:114-116, 118-126.

Offers a framework for understanding behavior of children in general and, particularly, of the emotionally disturbed child. In evaluating emotional disturbance in the classroom, one must consider the values, goals, pressures, and problems of the teacher, the basic needs of the peer group, and the disturbed child who shares the common goals and aspirations of the group. Because of inability to function in an integrated way, the disturbed child isolates himself from the group. The situation is both a challenge and a threat to the teacher.

See also 883.

CHILD WELFARE

See 882.

CHILDREN'S HOSPITALS—ADMINISTRATION

918. Mary Jane, Mother (Joseph P. Kennedy, Jr., Memorial Hosp., Brighton, Mass.)

Evaluation admission for the handicapped child. *Hospitals.* Oct., 1960. 34:20:58-60.

The new rehabilitation service at Joseph P. Kennedy, Jr., Memorial Hospital calls for complete examination and evaluation from a diagnostic and treatment-planning viewpoint. The program emphasizes parent co-operation to achieve shorter hospitalization of the child. Ambulatory or home treatment is used whenever it can supplement or substitute for inpatient treatment. Two case studies are included.

CHRONIC DISEASE—KENTUCKY

919. Frazier, Mae (Kentucky State Dept. of Health, 620 S. Third St., Louisville 2, Ky.)

Kentucky's program for the chronically ill. *Nursing Outlook.* Oct., 1960. 8:10:550-552.

A pilot project, integrating services for the chronically ill into existing public health programs in seven counties of Kentucky, has demonstrated that an effective bedside nursing care program can be developed with only a minimum of "extra" work on the part of the agency staff. Role of the public health nurse in the program is discussed, as well as the planning and procedure in setting up the service.

CHRONIC DISEASE—SOCIAL SERVICE

920. Goldmann, Franz (Council of Jewish Federations and Welfare Funds, 719 Seventh Ave., New York 19, N.Y.)

What are social workers in general hospitals doing for long-term patients? *Soc. Work.* Oct., 1960. 5:4:68-77.

A report of a special study conducted at five accredited nonprofit voluntary hospitals to determine the scope of the medical social worker's activities for patients with certain long-term diseases. Discussed are patient characteristics, proportion of patients served, time of referral, type

ABSTRACTS

and frequency of services, and co-operation with hospital staff and community agencies. Gaps in total patient care in long-term illness are pointed out. Other aspects of this research project were discussed in the author's previous articles listed in *Rehab. Lit.*, Sept., 1960, #646, and Nov., 1960, #847.

CLEFT PALATE—MEDICAL TREATMENT

921. Masters, F. W. (*Univ. of Kansas Med. Center, Kansas City 12, Kan.*)

The prevention and treatment of hearing loss in the cleft palate child, by F. W. Masters, H. G. Bingham, and D. W. Robinson. *Plastic and Reconstructive Surg.* May, 1960. 25:5:503-509.

All children with cleft palate treated at the University of Kansas Medical Center over the past five years have routinely received audiometric evaluation. It has been observed that incidence of hearing loss appears to rise almost by arithmetic progression as age increases, when palatal reconstruction is deferred beyond 18 months of age. High incidence of hearing loss appears to be associated also with type of palatal defect and method of repair. In the authors' experience, highest incidence occurred in prosthetically repaired clefts.

CLOTHING

922. Brett, Gladys (*Dept. of Phys. Med. and Rehab., Highland View Hosp., Harvard Rd., Cleveland 22, Ohio.*)

Dressing techniques for the severely involved hemiplegic patient. *Am. J. Occupational Ther.* Sept.-Oct., 1960. 14:5:262-264.

Given in detail are dressing technics found to be the most efficient in teaching the severely involved hemiplegic to become independent in daily living activities. Methods for donning or removing clothing and braces are described; the general considerations will be helpful to therapists involved in the training process.

DEAF—PSYCHOLOGICAL TESTS

923. Myklebust, Helmer R. (*Northwestern Univ., Evanston, Ill.*)

The psychological effects of deafness. *Am. Annals of the Deaf.* Sept., 1960. 105:4:372-385.

The major portion of the regular meeting of the Conference of Executives of American Schools for the Deaf, held at Northwestern University in April, 1960, was conducted by Dr. Myklebust and associates in the departments of speech and audiology. His address presents evidence indicating that the effect of sensory deprivation on intellectual capacity, personality, and language behavior can alter psychological responses of the deaf. A review of Dr. Myklebust's new book, *The Psychology of Deafness*, will appear in a future issue of *Rehab. Lit.*

DEAF—RESEARCH

924. Gallaudet College (*Washington 2, D.C.*)

Workshop on identification of researchable vocational rehabilitation problems of the deaf . . . June 19-22, 1960. *Am. Annals of the Deaf.* Sept., 1960. 105:4:335-370.

This special report of the first such conference held

to consider important research needs in vocational rehabilitation of the deaf presents recommendations drawn up by research workers in the fields of psychology, sociology, anthropology, audiology, communication, rehabilitation, and education. Systematic long-term research programs involving several disciplines were considered necessary if effective rehabilitation services for the deaf are to be achieved. Dr. Powrie V. Doctor was chairman of the Conference Steering Committee. (See *Rehab. Lit.*, Aug., 1960, #585.)

DEAF-BLIND—SPECIAL EDUCATION

925. Robbins, Nan

Educational beginnings with deaf-blind children. Watertown, Mass., Perkins School for the Blind, 1960. 80 p. (*Perkins publ. no. 21*)

The first of a series of curriculum guides for teachers of the deaf-blind, covering theory and philosophy of the program and outlining, in more detail, specific methods, guiding principles, goals, and technics for achieving them. Aspects of social development—self-care, socialization, communication, motor and intellectual behavior, and self-occupation—are discussed. Although developed mainly for the tactually oriented child, the program also considers procedures for developing residual hearing and usable sight. The author has been a member of Perkins School Department for the Deaf-Blind since 1957.

Available from Perkins School for the Blind, Watertown 72, Mass., at \$1.00 a copy.

DRIVERS

926. Pappanikou, A. J. (*Pineland Hosp. and Training Center, Pownal, Me.*)

First results of a residential school's driver education program, by A. J. Pappanikou and Peter W. Bowman. *Am. J. Mental Deficiency.* Sept., 1960. 65:2:194-198.

An interpretation of results of a driver education program with eight pupils at Pineland Hospital and Training Center. A relative amount of success was achieved; it was shown that some retardates can be taught to operate an automobile. Training should be given before pupils are discharged from the school. A previous article (see *Rehab. Lit.*, Apr., 1959, #309) described aims and administration of the program.

EMPLOYMENT (INDUSTRIAL)

See 891; 928; 930; 932; 942; 943; 944; 945; 960; 964; 980; 981.

EPILEPSY

927. National Epilepsy League (*130 N. Wells St., Chicago 6, Ill.*)

First National Institute on Epileptic Rehabilitation. *Rehab. Record.* Sept.-Oct., 1960. 1:5:19-25.

(Adaptations of three papers presented): Legal discrimination affecting employment of the epileptic, Howard D. Fabing.—12 questions for counselors, Madison H. Thomas.—Medical certification of seizure control, Edward D. Schwade.

The Institute, held in Chicago in May, 1960, was financed by the Office of Vocational Rehabilitation as part of its training-grant program. In addition to general dis-

cussion of the medical and vocational aspects of the condition, group discussions were held on environmental aspects, the medical, psychological, and social evaluation problems as they relate to employment, and specific counseling technics. The complete proceedings will be published at a later date.

EPILEPSY—EMPLOYMENT

928. Risch, Frank (3907 Manning Ave., Los Angeles 64, Calif.)

Epilepsy explored in California study, by Frank Risch and Joseph J. Henry. *J. Rehab.* Sept.-Oct., 1960. 26:5:13-15.

Ten years' experience with a workshop program at the VA Center, Los Angeles, has shown that steady gainful employment can be a stabilizing seizure-control measure, helping the epileptic to achieve vocational rehabilitation. Methods for handling discipline, sick calls, seizure control, productivity, and general well-being are discussed.

HAND

929. Jacobs, Bernard (*The Hospital for Special Surgery, New York 17, N.Y.*)

Opposition of the thumb and its restoration, by Bernard Jacobs and T. Campbell Thompson. *J. Bone and Joint Surg.* Sept., 1960. 42-A:6:1015-1026, 1039-1040.

Describes a relatively simple and effective method for restoring opposition of the thumb. Various concepts of the mechanism of opposition are mentioned and basic requirements for successful tendon transposition outlined. At the Hospital for Special Surgery, the preferred motor tendons for transfer in restoration of opposition have been the flexor sublimis of the ring finger and that of the long finger. Results were rated good in almost 80% of approximately 100 patients; in all but a few loss of opposition was caused by poliomyelitis. Surgery in children should not be delayed because of age or skeletal immaturity, the authors believe.

See also 914; 959.

HANDICRAFTS

See 885; 886.

HARD OF HEARING

See 912; 921.

HEART DISEASE—EMPLOYMENT

930. Kerkhof, Arthur C. (825 Nicollet Ave., Minneapolis 2, Minn.)

Some of the problems of employment of the cardiac in industry. *Indust. Med. and Surg.* Oct., 1960. 29:10:484-489.

Of primary importance in the employment of workers with cardiac conditions is fear on the part of the employee, labor unions, and industry. The physician's attitudes, as well as current interpretations of workmen's compensation laws, further complicate the cardiac's return to work. Dr. Kerkhof offers suggestions for overcoming medical and legal barriers to employment.

DECEMBER, 1960, Vol. 21, No. 12

HEMOPHILIA—SOCIAL SERVICE

931. Dowling, Jessie P. (*Clinical Center, Natl. Institutes of Health, Bethesda, Md.*)

Preventing dependency patterns in chronically ill children. *Soc. Casework.* Oct., 1960. 41:8:395-402.

Therapeutic approaches used in helping children with hemophilia overcome exaggerated dependency in the hospital setting and develop self-reliance in managing their illness are discussed. Observation of four adults and three adolescents included in the study revealed common characteristics exemplifying the passive-dependent reaction; counterparts of adult reactions were noted in five children with whom the staff worked. Patients were subjects of medical research studies in hematology at the Clinical Center of the National Institutes of Health.

HOME ECONOMICS

932. Stubbs, Miriam M. (*U.S. Off. of Vocational Rehabilitation, Washington 25, D.C.*)

10,000,000 handicapped women and the public program. *Rehab. Record.* Sept.-Oct., 1960. 1:5:12-16.

Gives estimates of the number of women in the labor force, the percentage of handicapped women, the number rehabilitated in the past five years, major disability causes in women, and the type of services provided for rehabilitation. Also reviews projects supported by federal and state vocational rehabilitation agencies, the objective of which is to aid women in using remaining abilities in spite of handicaps. Projects dealing with home management and child care are discussed more fully.

HOMEBOUND—RECREATION

See 885; 886.

HOSPITALS—PHYSICAL THERAPY DEPARTMENT

933. Littauer, David (216 S. Kingshighway Blvd., St. Louis 10, Mo.)

Long-term care in the general hospital; its effect on the physical therapy department. *Phys. Therapy Rev.* Sept., 1960. 40:9:641-643.

The general hospital can no longer gear its operation exclusively to care of the acute, short-term patient; the trend is for establishment of services to long-term patients, with greater emphasis on restorative services. Physical therapy will be used more extensively by practicing physicians for a greater variety of conditions. Implications of these changes for the therapist in the hospital physical therapy department are discussed.

HYDROTHERAPY

934. Worden, Ralph E. (*UCLA Medical Center, 10833 Le Conte Ave., Los Angeles, Calif.*)

Hydrotherapy unit, by Ralph E. Worden and James P. Zimmerman. *Arch. Phys. Med. and Rehab.* Oct., 1960. 41:10:452-456.

Describes a custom-built hydrotherapy unit at Children's Hospital, Columbus, Ohio, and reports three years' experience in its use and maintenance. Three separate stainless steel compartments comprise the unit, which offers

ABSTRACTS

distinct advantages over the conventional hydrotherapy unit and usual floor level therapeutic swimming pool. Construction specifications are included.

MEDICINE (INDUSTRIAL)

See 891; 960; 980.

MENTAL DEFECTIVES

See 887; 888.

MENTAL DEFECTIVES—INSTITUTIONS

935. Eagle, Edward (2230 Asbury Ave., Evanston, Ill.)

Charges for care and maintenance in state institutions for the mentally retarded. *Am. J. Mental Deficiency*. Sept., 1960. 65:2:199-207.

A summary of data obtained from 50 states on fees for institutionalized care of the mentally retarded. Little uniformity exists among the 40 states requiring parents to pay for care; high charges per se do not reflect the relative quality of care provided. The report reflects the status in each state as of January, 1960.

MENTAL DEFECTIVES—PARENT EDUCATION

936. The Training School at Vineland (N.J.)

Home care of the mentally retarded. Vineland, The School, 1960. 26 p.

A booklet prepared to help parents in the home-care and training of the mentally retarded child, to acquaint them with community resources available, and to explain the practical technics of day-to-day training.

Available from the Public Relations Department, The Training School at Vineland, Vineland, N.J.

MENTAL DEFECTIVES—PSYCHOLOGICAL TESTS

937. Cromwell, Rue L. (George Peabody College, Nashville 5, Tenn.)

Studies in activity level: IV. Effects of visual stimulation during task performance in mental defectives, by Rue L. Cromwell and James G. Foshee. *Am. J. Mental Deficiency*. Sept., 1960. 65:2:248-251.

The fourth in a series of articles concerned with studies investigating effects of visual and auditory stimulation on the activity of mentally retarded persons. Organic and familial subjects were tested on a card-sorting procedure under visual stimulation procedures described previously (see *Rehab. Lit.*, Aug., 1959, #662). No differences in activity or performance were found as a function of reduced or increased visual stimulation or organic-familial classification. An unpredicted finding was the interaction between sequence and diagnostic classification as it affects activity level.

938. Miller, Martin B. (George Peabody Coll. for Teachers, Nashville, Tenn.)

Psychometric and clinical studies in mental deficiency, 1954-59; a selective review and critique. *Am. J. Mental Deficiency*. Sept., 1960. 65:2:182-193.

A review of clinical and psychometric studies of the mentally retarded made from 1954 through 1959, with a brief summary of seven discernible trends. Some weak-

nesses and strengths apparent in the use of psychological tests with the mentally retarded are indicated.

MENTAL DEFECTIVES—SPECIAL EDUCATION

See 926; 946; 947.

MENTAL DEFECTIVES—SPEECH CORRECTION

939. Goda, Sidney (Johnstone Training and Research Center, Bordentown, N.J.)

Vocal utterances of young moderately and severely retarded non-speaking children. *Am. J. Mental Deficiency*. Sept., 1960. 65:2:269-273.

Need for finer analysis of the sound response of children without speech is suggested. Responses of 8 non-speaking young moderately and severely retarded children indicated developmental differences with implications for speech training. Five levels of speech development are described. Prognosis for the development of speech can be gauged more accurately through such analysis.

940. Johnson, G. Orville (805 S. Crouse Ave., Syracuse 10, N.Y.)

Speech and language development of a group of mentally deficient children enrolled in training programs, by G. Orville Johnson, Rudolph J. Capobianco, and Donald Y. Miller. *Exceptional Children*. Oct., 1960. 27:2:72-77.

As part of a larger research project on severely retarded children conducted by Dr. Johnson and associates at Syracuse University, an intensive language development program providing speech therapy for trainable mentally retarded children from public school classes and institutions was undertaken. A control, or nontherapy, group received no supplementary training but showed more progress over the school year. The difference, however, was not significant in terms of language growth. Methods of the study and characteristics of the subjects are discussed.

MENTAL DEFECTIVES—SURVEYS

941. Belinkoff, Cornelia (520 W. 120th St., New York 27, N.Y.)

Community attitudes toward mental retardation. *Am. J. Mental Deficiency*. Sept., 1960. 65:2:221-226.

A report of observations made during the course of locating and screening educable mentally retarded children for the Columbia University Teachers College Mental Retardation Project, in operation since 1957. Sources of referrals, parental attitudes, and objections to the original name of the Project are discussed.

MENTAL DISEASE

See 883.

MENTAL DISEASE—EMPLOYMENT

942. Early, Donal F. (Fishponds Hosp., Bristol, England)

The Industrial Therapy Organization (Bristol); a development of work in hospital. *Lancet*. Oct. 1, 1960. 7153:754-757.

The Organization is a nonprofit company set up to offer medically and industrially supervised employment training to chronic mental patients. Training begun in the

REHABILITATION LITERATURE

hospital industrial therapy department is continued at ITO under conditions approximating as nearly as possible those of an ordinary factory. Worker-patients who improve under these conditions will be given still further training in regular industry. The value of such a scheme for industrial and social rehabilitation of long-stay patients is evident.

943. Himler, Leonard E. (*School of Public Health, Univ. of Michigan, Ann Arbor, Mich.*)

Occupational rehabilitation following mental illness. *Indust. Med. and Surg.* Oct., 1960. 29:10:480-483.

As in physical illness, early recognition and intensive psychiatric treatment following onset of mental illness are highly favorable factors in the prognosis for rehabilitation. Five factors influencing successful rehabilitation and re-employment of workers are discussed. The industrial physician should assume leadership roles in educating employers, the patient, and his family toward the possibilities for rehabilitation.

944. Marquardt, Francis B. (*Neuropsychiatric Hosp., VA Center, Los Angeles, Calif.*)

Therapeutic work assignments in a rehabilitation program. *J. Am. Dietetic Assn.* Nov., 1960. 37:5:472-475.

Under the "industrial therapy" program of the VA Center's Physical Medicine and Rehabilitation Service, work assignments are provided for neuropsychiatric patients deemed employable. The Dietetic Service participates in this phase of treatment; conferences between personnel of the Service and members of the treatment team are held, to aid understanding of the patient's problems and to report progress. Therapeutic work not only helps to re-establish acceptable work patterns but can be a means of achieving treatment objectives.

945. Olshansky, Simon (*Cambridge Service for Retarded Children, Cambridge, Mass.*)

Survey of employment experiences of patients discharged from three state mental hospitals during period 1951-1953, by Simon Olshansky, Samuel Grob, and Miriam Ekdahl. *Mental Hygiene.* Oct., 1960. 44:4:510-521.

A condensed report of the second phase of an extended study first reported in 1958 (see *Rehab. Lit.*, Sept., 1958, #1012). Findings, interpretations, and conclusions based on employment experiences of discharged mental patients are presented. Most significant finding was that all patients able and willing to work were employed; few were unemployed because of the alleged and real resistances of employers. Questions concerning five common assumptions in regard to employment of exmental patients are raised by the findings of the study.

MULTIPLE HANDICAPS—SPECIAL EDUCATION

946. Budds, Frank C. (*Resource Teacher for the Blind, San Leandro Unified School District, Calif.*)

Some initial experiences with mentally handicapped children who are attending schools for the blind. *Internatl. J. Educ. of the Blind.* Oct., 1960. 10:1:16-23.

A report on an ungraded class established at the Michigan School for the Blind for mentally retarded blind children classified as "upper elementary." Data on

characteristics of pupils assigned to the class and a discussion of curriculum organization and adaptations in teaching methods are included.

947. Henderson, Robert A. (*California State Dept. of Education, Sacramento 14, Calif.*)

Teaching the multiply handicapped mentally retarded child. *Exceptional Children.* Oct., 1960. 27:2:90-93.

A brief review of studies of multiple physical handicaps in the mentally retarded leaves no doubt that in these children incidence is rather high. The significance of secondary handicaps accompanying mental retardation, their impact on the child and the parents, and the implications for educational services are discussed. Additional research should be directed toward problems arising from lack of reliable diagnostic instruments, specific clinical teaching methods and materials, and agreement on type of special education facilities to educate the multiply handicapped mentally retarded.

See also 915.

MULTIPLE SCLEROSIS—JAPAN

948. Okinaka, Shigeo (*Univ. of Tokyo School of Medicine, Tokyo, Japan*)

Multiple sclerosis in northern and southern Japan, by Shigeo Okinaka (and others). *World Neurology.* July, 1960. 1:1:22-42.

Population surveys to determine prevalence of multiple sclerosis in two Japanese cities differing in climate and in geographic latitude provided data for comparison with similar studies made in North America and Europe that suggested an association between prevalence of the disease and temperate climate. Findings support the belief that the disease is less prevalent in Japan; similarity of rates between the two cities did not bear out theories of previous studies. Most of the few cases seen in Japan were atypical as compared with the usual manifestations in the United Kingdom or North America.

MULTIPLE SCLEROSIS—MEDICAL TREATMENT

949. Sawyer, Glen Thomas (*2115 E. River Terrace, Minneapolis, Minn.*)

Treatment of multiple sclerosis with tolbutamide; a preliminary report. *J. Am. Med. Assn.* Oct. 1, 1960. 174:5:470-473.

In same issue: Tolbutamide in nondiabetic disorders (an editorial). p. 519.

Definite improvement in signs and symptoms of seven patients with multiple sclerosis was noted when they were treated with the drug, except for times when a high carbohydrate diet was started. It has been suggested by several authors of earlier studies that multiple sclerosis may be primarily a disorder of carbohydrate metabolism. Four case histories are included.

The editorial on p. 519 reviews use of tolbutamide and other oral hypoglycemic agents in the treatment of diabetic and nondiabetic diseases and points out the necessity for further clinical and basic investigations to determine the mechanism of the action responsible for beneficial results. (See *Rehab. Lit.*, #979, this issue, for another article on the use of tolbutamide.)

ABSTRACTS

MULTIPLE SCLEROSIS—SPEECH CORRECTION

950. Farmakides, Mary N. (*Apt. 8, 2511 Overlook Rd., Cleveland Heights 6, Ohio*)

Speech problems of patients with multiple sclerosis, by Mary N. Farmakides and Daniel R. Boone. *J. Speech and Hear. Disorders*. Nov., 1960. 25:4:385-390.

A review of case histories of 82 patients with multiple sclerosis, referred to the speech and hearing therapy section, Physical Medicine and Rehabilitation Department, Highland View Hospital, Cleveland. Five characteristics contributing to their dysarthria are discussed. Of 68 patients receiving therapy, 58 showed improvement in speech. It is recommended that more clinical programs initiate speech rehabilitation for such patients.

MULTIPLE SCLEROSIS—STATISTICS

951. Alter, Milton (*Neurological Institute of New York, 710 W. 168th St., New York 32, N.Y.*)

Geographic distribution of multiple sclerosis; a comparison of prevalence in Charleston County, South Carolina, U.S.A., and Halifax County, Nova Scotia, Canada, by Milton Alter (and others). *World Neurology*. July, 1960. 1:1:55-70.

A prevalence rate 2.4 times greater in Halifax County than in Charleston County, S.C., was determined by an epidemiologic survey. Although the difference is not large, it supports the impression that there is a geographic variation in frequency of the disease. A discussion of variables involved in the study is included; none is considered of sufficient magnitude to explain the difference in prevalence in the two areas. Résumés of the article are given in French, Spanish, and German.

MUSIC

952. Sato, Chiyoko (*Municipal Komei School for the Physically Handicapped, Tokyo, Japan*)

Survey on vocal pitch range of cerebral palsied children. *Cerebral Palsy Rev.* Sept.-Oct., 1960. 21:5:4-5, 8-9.

Phonation difficulties of cerebral palsied children make group singing nearly impossible for them. The author attempted to determine the range within which phonation would be easiest; methods and results with 103 cerebral palsied children and 31 with other types of disabilities are discussed. No solution was discovered for the problem of adapting teaching methods to overcome the difficulties of the speech handicapped.

NEUROLOGY

953. Missiuro, Woldzimierz (*Director, Institute for Research in Physical Culture, Warsaw, Poland*)

Neurophysiological principles in the rehabilitation of physically disabled persons. *Am. J. Phys. Med.* Oct., 1960. 39:5:171-177.

Some factors of the complex phenomena associated with the process of compensation for impaired function in the motor system are discussed, stressing the directing role of the central nervous system in adjustment to disability. Physiological objections are raised against conservative procedures of rehabilitation, characterized by avoidance of activity of the injured part of the body. Restitution of normal muscular tension and normal motor

function does not depend exclusively on repair of local tissue damage but is also dependent upon removal of abnormal aftereffects in the central nervous system.

See also 903; 916; 963.

NUTRITION

See 949; 979.

OCCUPATIONAL THERAPY

See 885; 886; 890; 892; 966.

OLD AGE

See p. 370.

OLD AGE—SPEECH CORRECTION

954. Hudson, Atwood (*Speech Clinic, Rockford Coll., Rockford, Ill.*)

Communication barriers of the older person. *Ill. Med. J.* Oct., 1960. 118:4:219-221.

Too little attention is being given to speech problems of elderly persons; physicians should be more aware of possibilities for rehabilitation of geriatric patients with handicapping hearing and speech conditions. Causes of language and hearing loss are discussed briefly and community action to overcome these defects suggested. For a more extended discussion of the subject, see article listed in *Rehab. Lit.*, Oct., 1960, #760.

ORTHOPEDICS

See p. 378.

PARALYSIS AGITANS—MEDICAL TREATMENT

955. Riklan, Manuel (*1985 Sedgwick Ave., Bronx 53, N.Y.*)

Chemosurgery and multidiscipline rehabilitation in Parkinson's disease, by Manuel Riklan and Irving S. Cooper. *Rehab. Record*. Sept.-Oct., 1960. 1:5:26-31.

New surgical technics in the treatment of Parkinson's disease, combined with the multidisciplinary approach to rehabilitation, have resulted in more hopeful prognosis for these patients. A major vocational benefit from surgery has been the extension of work life in those previously employed. With appropriate selection of candidates for surgery, successful results in over 80% of the patients treated can be expected. Four case histories illustrate the benefits of a total rehabilitation program in patients with parkinsonism.

956. Taarnhøj, Palle (*Amtssygehuset, Glostrup, Denmark*)

Chemopallidectomy as a treatment for Parkinson's disease; evaluation of results in 118 patients, by Palle Taarnhøj, Dolores-Crystal Arnois, and Laurence A. Donahue. *J. Neurosurg.* May, 1960. 17:3:459-468.

Cooper's new surgical treatment for Parkinson's disease was used, with a few minor and probably insignificant variations, in 118 patients who underwent 136 procedures. Average follow-up time has been 10 months. Rate of complications in this series was higher than that reported by Cooper and others who have used the procedure;

many of the patients were over 60 years of age with far-advanced disease. Results are analyzed; length of time the patient will remain improved still is unknown. In the authors' opinion, although the procedure offers promising results, the majority of patients will experience only a limited time of benefit.

PARTIALLY SIGHTED

957. Milder, Benjamin (640 S. Kingshighway Blvd., St. Louis 10, Mo.)

Visual rehabilitation for the near blind. *Mo. Med.* Nov., 1960. 57:11:1353-1357.

Organization, administration, and source of referral to the Optical Aids Clinic, Washington University School of Medicine, St. Louis, are discussed. Data are included on factors determining utilization of aids, disease process, and age groups of persons receiving optical aids. Benefits of this type of clinic for the patient and for public education purposes are numerous.

PARTIALLY SIGHTED—SPECIAL EDUCATION

958. Sibert, Katie N. (Stanislaus County Schools, Modesta, Calif.)

Instructional materials and procedures for the partially seeing. *Sight-Saving Rev.* Fall, 1960. 30:3:162-165.

Equipment used by an itinerant teacher of visually handicapped children enrolled in regular classrooms is described, as well as her daily teaching routine and various services given under the program.

PEDIATRICS

See 895.

PHYSICAL EFFICIENCY

959. Madison, Harry L. (Dept. of Psychology, Univ. of Wisconsin, Milwaukee, Wis.)

An experimental study of motivation, by Harry L. Madison and Marjorie B. Herring. *Am. J. Occupational Ther.* Sept.-Oct., 1960. 14:5:253-255.

A device for recording metacarpophalangeal joint movements of patients with impaired use of the hands was used to compare finger movements of handicapped and nonhandicapped subjects and to gauge rate of improvement in motor skills. Handicapped subjects showed uniformly greater improvement on all five tests administered although differences recorded were not statistically significant. The additional motivation afforded by an easily visualized record of progress is believed to lead to faster improvement in performance. This research project, supported by a grant from the National Institutes of Health, has continued to receive support from the University of Wisconsin Graduate School.

PHYSICAL EXAMINATIONS

960. Hettinger, Theodor (Max Planck Institut, Rheinlanddamm 201, Dortmund, Germany)

A work physiology study of an assembly line operation, by Theodor Hettinger and Kaare Rodahl. *J. Occupational Med.* Nov., 1960. 2:11:532-535.

Findings of the pilot study revealed low physical-work

capacity in most of the participating subjects. A positive relationship was noted between evidence of physical fatigue (judged by deterioration in physical-work capacity during the day) and poor physical condition. It is suggested that assessment of work capacity could be an aid in recruiting and placing industrial workers; efficiency and productivity could be improved through a relatively moderate physical training program for workers physically below par.

PHYSICAL THERAPY

961. Adkins, Hazel V. (Rancho Los Amigos Hosp., Downey, Calif.)

Selective stretching for the paralytic patient, by Hazel V. Adkins (and others). *Phys. Therapy Rev.* Sept., 1960. 40:9:644-648.

Since vigorous stretching of supportive tissue in paralyzed or severely weakened body segments often results in disabling instability or can cause reactive scarring that may result in complete immobility, stretching must be selective and correlated with muscle power. Specific examples are discussed to show how maintaining fascial tightness has proved advantageous to paralyzed patients. Article is illustrated.

962. London, P. S. (Birmingham Accident Hosp., Birmingham, England)

Recent injuries; the purpose of physiotherapy in the treatment of recent injuries. *Physiotherapy.* Oct., 1960. 46:10:279-290.

Another in the "Revision Series" of articles dealing with physical therapy technics in specific conditions. The nature of injuries, objectives of treatment, the surgeon's role, and treatment provided by the therapist are discussed. Includes sections on fractures, severe injuries of the head and chest, acute, chronic, or recurrent lesions, and athletic injuries. Illustrated.

See also 934.

POLIOMYELITIS—MEDICAL TREATMENT

963. Sutherland, David H. (595 Buckingham Way, San Francisco 27, Calif.)

Electromyographic study of transplanted muscles about the knee in poliomyelitic patients, by David H. Sutherland, Frederick C. Bost, and Edwin R. Schottstaedt. *J. Bone and Joint Surg.* Sept., 1960. 42-A:6:919-939.

Electromyographic study of 39 muscle transplantations in 21 patients with paralysis of the lower extremity due to poliomyelitis yielded findings in regard to phasic activity of transplanted muscles about the knee. Improvements in surgical technics are described, and factors that may have bearing on phase conversion of transplanted and nontransplanted muscles are discussed.

PSYCHIATRY

964. Group for the Advancement of Psychiatry

Preventive psychiatry in the armed forces; with some implications for civilian use, formulated by the Committee on Governmental Agencies. New York, The Association, 1960. (40) p. tabs., charts. (Rep. no. 47)

Superior preventive psychiatric programs in operation

ABSTRACTS

during the Korean War, as compared with those of World War II, are considered responsible for the low rate of psychiatric discharge. This report traces the development of preventive psychiatric technics, the identification of psychological and social factors influencing military effectiveness, and how such programs' operational concepts can be applied to industry and other organized groups. The conviction that the emotionally handicapped, as well as the physically handicapped, are employable and that employee turnover can be effectively reduced through preventive psychiatry is emphasized. Attitudes, behavior, and policies of top management are particularly important in dealing with variable relationship stresses inevitable in organizational effort by any group.

Available from Publications Office, Group for the Advancement of Psychiatry, 104 E. 25th St., New York 10, N.Y., at 75¢ a copy (less in quantity orders).

PSYCHOLOGICAL TESTS

965. Dils, Charles W. (*Longview State Hosp., Cincinnati, Ohio*)

The Colored Progressive Matrices as an indicator of brain damage. *J. Clinical Psych.* Oct., 1960. 16:4:414-416.

Results of use of the book form of the Colored Progressive Matrices (1947 form) in comparing performance of patients with organic or nonorganic brain damage suggest the test may be valuable in the detection of brain dysfunction when conditions of psychosis and idiopathic mental deficiency can be excluded. A special scoring system was devised that correctly identified 82% of the organics and 92% of the nonorganics. Usefulness of the test was observed to be reduced in working with institutionalized adolescents.

966. Llorens, Lela A. (*Lafayette Clinic, 951 E. Lafayette St., Detroit, Mich.*)

Psychological tests in planning therapy goals. *Am. J. Occupational Ther.* Sept.-Oct., 1960. 14:5:243-246.

Examples of behavior in the immature child with personality disorders, in the neurotic or psychotic child, and in the child with neurological impairment (brain injury) illustrate the use of psychological evaluation in planning dynamic occupational therapy objectives. Goals established early in treatment are changed during the course of therapy depending upon the child's behavior, his relationship to the therapist, and the over-all therapeutic goals set by the psychiatrist.

967. Urmer, Albert H. (*Rancho Los Amigos Hosp., Downey, Calif.*)

A hospital adjustment scale for chronic disease patients, by Albert H. Urmer, Zena Malek, and Leonard V. Wendland. *J. Clinical Psych.* Oct., 1960. 16:4:397-398.

Describes a new method developed for rating hospital adjustment in chronic disease patients; easily administered, it provides a fairly objective means of evaluating adjustment and changes in adjustment. The scale consists of 55 items, most based on the Hospital Adjustment Scale devised by Ferguson, McReynolds, and Ballachey and published in 1953 by Stanford University Press.

See also 918.

PSYCHOLOGY

968. Havas, Frederic de

Perceptual integration; an educational task. *Special Education.* Sept., 1960. 49:4:19-24.

In this lecture delivered at the 16th International Congress of Psychology in 1960, development of sense perceptions and their gradual integration are traced. Deficiency in sense co-ordination, it is pointed out, results in an erroneous picture of reality and behavior disorders. To produce perceptual integration is an educational task; much research is still needed to determine how co-ordination between the senses may be achieved.

969. Palmer, Martin (*2400 Jardine Dr., Wichita, Kan.*)

Managing overprotective tendencies with speech-impaired children. *J. Speech and Hear. Disorders.* Nov., 1960. 25:4:405-408.

Overprotection is viewed as a natural concomitant of the appearance of a handicap in the family unit; types of overprotection and their psychological bases are discussed. Management of such reactions is not difficult when parents appear to have normal reactions. Where emotional disorders are evident in parents, referral for appropriate consultation and therapy is essential.

See also 973.

PSYCHOTHERAPY

970. Selkin, James (*Utility Workshop of Denver, 632 E. 17th Ave., Denver, Colo.*)

Group therapy enters the sheltered workshop, by James Selkin and Gerald Meyer. *J. Rehab.* Sept.-Oct., 1960. 26:5:8-9.

A year's experience with group therapy for sheltered workshop clients proves its worth for both the emotionally and physically disabled. Some simple rules for successful group therapy are suggested; at the Denver workshop the therapist focuses discussion on the client and his approach to the work situation.

See also 883; 897.

REHABILITATION

971. British Council for Rehabilitation of the Disabled

The proceedings of a three-day residential course on rehabilitation, "From incapacity to capacity," convened by the . . . Dublin, July 12-14, 1960. *Rehabilitation.* Sept., 1960. 50 p.

Contents: (Presidential address on opening the Conference), Sean MacEntee.—The role of the hospital in medical rehabilitation, F. S. Cooksey.—Practical problems of rehabilitation in Ireland, H. E. Counihan.—Rehabilitation as a subject in the medical curriculum, W. J. E. Jessop.—The work of an outpatient medical rehabilitation centre, James G. Sommerville.—The rehabilitation of the psychiatric patient, J. N. P. Moore.—The role of the nurse in industry, Helen M. Cousens.—Fifty years of industrial rehabilitation, Brian Pringle.—Public health services in relation to rehabilitation, H. O'Flanagan.—Rehabilitation; a problem in social medicine? G. G. Browning.—The rehabilitation of the mentally handicapped, John

P. A. Ryan.—"Co-operation," the setting up and operation of a Preparatory Training Bureau, Ian R. Henderson.—Rehabilitation of the handicapped in a changing world, John Arthur.—Summary and appraisal of the work of the Conference, E. F. O'Doherty.

The journal *Rehabilitation* is published by the British Council for Rehabilitation of the Disabled, Tavistock House (South), Tavistock Square, London, W.C. 1, England.

972. Ribera, Victor

Rehabilitation guía y glosario. New York, Internatl. Soc. for the Welfare of Cripples, 1960. 57 p. Text in Spanish.

A booklet prepared to acquaint medical and ancillary personnel in Latin American countries with the concept of rehabilitation, aspects of comprehensive programs, and the vocabulary of various therapies used in treatment and rehabilitation. Published by the International Society for Rehabilitation of the Disabled (formerly ISWC) through the assistance of the Milbank Memorial Fund, it is distributed by the Society, 701 First Ave., New York 17, N.Y.

See also 932.

REHABILITATION—ADMINISTRATION

See 891; 898; 899.

REHABILITATION—PERSONNEL

973. Richardson, Stephen A. (*Assn. for the Aid of Crippled Children*, 345 E. 46th St., New York 17, N.Y.)

Psychological problems in rehabilitation. *J. Rehab.* Sept.-Oct., 1960. 26:5:20-22.

Interpersonal relations of, and social perception among, interdisciplinary members of the rehabilitation team can influence the degree of success achieved with patients. Misunderstandings between the physician and patient illustrate the type of practical psychological problem encountered in rehabilitation.

See also 978.

REHABILITATION—STUDY UNITS AND COURSES

974. J. Hillis Miller Health Center, Gainesville (Fla.)

"New directions in health"; proceedings of a conference to formally announce the College of Health Related Services and Rehabilitation Area . . . February 5-6, 1960. Gainesville, The Center, 1960. 63 p.

Contents: Program developments in the J. Hillis Miller Health Center (panel discussion), Russell S. Poor, chairman; George T. Harrell, Dorothy M. Smith, Darrel J. Mase, and L. Russell Jordan.—Evaluation of program developments, Alfred R. Shands, Jr.—Sick people in a troubled world, Howard A. Rusk.—Greetings from the University, Harry M. Philpott.—Recognition of staff and associates, Darrel J. Mase.—The J. Hillis Miller Health Center; symbol of the future in rehabilitation services, Mary E. Switzer.

See also 895; 971.

REHABILITATION—SURVEYS—CALIFORNIA

See 894.

REHABILITATION CENTERS

975. U.S. Public Health Service

Compilation of studies on planning multiple disability rehabilitation facilities (by) . . . Division of Hospital and Medical Facilities. Washington, D.C., Govt. Print. Off., 1960. 44 p. illus., floor plans.

Criteria for the design and planning of administrative, evaluation, and treatment facilities, inpatient nursing units for adults and children, prevocational training unit, and special education, psychological, and medical social services within the hospital are discussed and illustrated. Design principles can also be adapted to facilities not attached to the hospital. The information has been drawn from a series of articles that has appeared in *Hospitals*, the Journal of the American Hospital Association. The master plan and the section on general design requirements should prove useful in determining the basic requirements to meet local and specific needs. Additional aids are the bibliography of selected references and a list of health and welfare organizations from which additional rehabilitation information may be obtained.

SHELTERED WORKSHOPS

See 928; 970.

SPECIAL EDUCATION—EQUIPMENT

976. Stolurow, Lawrence M. (809 Dodds Dr., Champaign, Ill.)

Automation in special education. *Exceptional Children.* Oct., 1960. 27:2:78-83.

Describes functions of the teaching machine, its usefulness in the learning system, benefits to teacher and student, and current research problems under investigation at the University of Illinois's Institute for Research on Exceptional Children. (For a more detailed discussion of automation as a teaching aid, see the author's article listed in *Rehab. Lit.*, Nov., 1960, #868.)

SPEECH CORRECTION

See 897.

SPEECH CORRECTION—PARENT EDUCATION

977. Moll, Kenneth L. (*Speech Clinic, East Hall, State Univ. of Iowa, Iowa City, Iowa*)

Attitudes of mothers of articulatory-impaired and speech-retarded children, by Kenneth L. Moll and Frederic L. Darley. *J. Speech and Hear. Disorders.* Nov., 1960. 25:4:377-384.

Relative insensitivity of two attitude scales in detecting attitude differences in mothers of children with articulatory disorders or delayed speech development appears to limit usefulness of the scales for clinical investigations. Previous investigators had reported differences characterizing the two groups of mothers.

See also 969.

ABSTRACTS

SPEECH CORRECTION—PERSONNEL

978. Sheehan, Joseph G. (416 21st Place, Santa Monica, Calif.)

The speech pathologist; his interests, activities, and attitudes, by Joseph G. Sheehan, Robert G. Hadley, and Gerald R. White. *J. Speech and Hear. Disorders*. Nov., 1960. 25:4:317-322.

Using the Strong Vocational Interest Blank to survey interests and attitudes of speech and hearing therapists, the authors collected data they hope will be of value in predicting job satisfaction and career longevity in prospective speech pathologists. Subjects were all those listed as Fellows of the American Speech and Hearing Association in the 1958 directory.

THROMBOANGIITIS OBLITERANS

979. Singh, Inder (Armed Forces Medical College, Poona, India)

Tolbutamide in the treatment of thromboangiitis obliterans, by Inder Singh and N. S. Brara. *Lancet*. Sept. 17, 1960. 7151:625-627.

Treatment of thromboangiitis obliterans by tolbutamide in 36 males has resulted in consistently good results. Spectacular relief of intermittent claudication and rest pain was achieved in 34 patients. Two patients with neuritic pain showed no response to treatment. Relief persisted for one to seven weeks after therapy was discontinued. No explanation for the beneficial effect of the drug in thromboangiitis obliterans can be given at the present time. (See *Rehab. Lit.*, #949, this issue, for another report on tolbutamide.)

(Continued from page 386.)

rehabilitation and for what kind. This was true before the program provided medical rehabilitation. The problem we face in microcosm in vocational rehabilitation can confront all medicine in another generation unless we vigorously face up to the problems of medical management.

A most discouraging aspect of rehabilitation is the enormous amount of work that is required to undo the physical and emotional damage caused by the neglect our patients have suffered for years. Why is this? We doctors are found wanting when the patient must be guided through a wide range of services not part of our training and not under our intimate control. Unless we accept the responsibility to manage the patient's entire return to function, we must expect the patient to get paramedical and training services without our consultation and guidance.

The changing nature of health problems is forcing the profession of medicine toward a major decision—we will adapt ourselves through medical management to the whole patient and the whole problem, or we can expect a long cycle in which our area of responsibility for health care will be gradually constricted as it is now in some parts of rehabilitation. The sick person will always want to

TUBERCULOSIS

980. Hamlin, L. E. (Am. Brake Shoe Co., 4550 W. 25th St., Chicago 3, Ill.)

Rehabilitation of foundry workers with active pulmonary tuberculosis; a study of 21 employees over a period of 10 years. *Indust. Med. and Surg.* Oct., 1960. 29:10:453-460.

An investigation of the amount of active, indeterminate, and inactive pulmonary tuberculosis among 4,512 employees in 32 foundries operated by one company revealed an active case incidence of less than one percent. Of the 21 employees with active disease status who were studied, 66.7% returned to some form of light work in from one to 12 months. Prompt, effective treatment following early detection of disease can reduce rehabilitation and industrial management problems.

WORKMEN'S COMPENSATION

981. U.S. Bureau of Labor Standards

State workmen's compensation laws. Washington, D.C., Govt. Print. Off., 1960. 70 p. tabs. (Bul. 161, rev. May, 1960)

This basic summary of the provisions of state workmen's compensation laws, last revised in 1957, analyzes the legislative acts and administrative rulings in regard to persons and types of injuries and diseases covered, amount and period of benefits, rehabilitation benefits, subsequent injury compensation, and provisions for special cases. Tables are used for comparative purposes.

Available from U.S. Superintendent of Documents, Government Printing Office, Washington 25, D.C., at 30¢ a copy.

See also 889, 891.

turn with confidence to someone who cares, but if we permit the fragmentation of health care to increase it may be generations before the people realize their loss.

Rehabilitation has pointed the way in this new emphasis. Increasingly medical schools are using this process to give students experience in the many-to-one management approach to complicated care. Students are learning the value of bringing in rehabilitation as soon as the disabled patient can think of something besides pain. In the dynamic rehabilitation process, the patient's concentration is shifted from what is lost to what is left. The plans for his refitting, retraining, and re-entry into the world he has lost are the sweet syrup of hope in this therapeutic regimen.

The Journal of Medical Education is the official publication of the Association of American Medical Colleges and is published monthly by the University of Chicago Press, 5750 Ellis Ave., Chicago 37, Ill.; subscription rate \$7.00 per year, \$13.50 two years, \$19.50 three years, \$1.00 per single copy; foreign, \$8.00 per year, \$15.50 two years, \$22.50 three years, \$1.25 per single copy; Pan America and Canada, \$7.50 per year, \$14.50 two years, \$21.00 three years; supplements, \$2.00.

Workshop Established To Explore Potentials of Cerebral Palsied

A NEW Training Workshop for the Cerebral Palsied, opened October 4, in New York City will seek to develop improved workshop technics to meet the cerebral palsied's complex needs. Meyer T. Feffer, co-ordinator, heads a staff of six persons at the Workshop, located in the Institute for the Crippled and Disabled's Industrial Rehabilitation Service, 621 Avenue of the Americas. For the first year, the new program will be supported by a grant of about \$40,000 given by United Cerebral Palsy of New York City. The Workshop program began with 25 cerebral palsied persons in their teens and twenties. As training methods and types of work are tested and found suitable, this number will be increased. The Institute reports that it spends more than \$250,000 a year on its cerebral palsy program in research, teaching, and patient services.

New Quarterly Abstracts Speech and Hearing Literature

VOLUME 1, NO. 1, of *DSH Abstracts* was issued in October by Deafness Speech and Hearing Publications, which is sponsored jointly by the American Speech and Hearing Association, 1001 Connecticut Ave., N.W., Washington 6, D.C., and Gallaudet College. In addition to the 336 abstracts of current references pertaining to deafness, speech, and hearing, the initial issue contained a listing of 172 graduate theses in these areas reported for 1958. *DSH Abstracts* is published quarterly; the annual subscription rate is \$8.00 (\$8.50 outside the United States).

New Public Affairs Pamphlets Available

RECENT ISSUES of the Public Affairs Committee are *Paraplegia; A Head, a Heart, and Two Big Wheels* (Public Affairs pamph. no. 300) and *Meeting the Challenge of Cerebral Palsy* (Public Affairs pamph. no. 158B), both by Jules Saltman. Mr. Saltman is a free-lance writer on medical and health subjects and a consultant in educational materials for leading health foundations. The first-named publication was prepared in co-operation with the National Paraplegia Foundation. Both 28-page pamphlets may be obtained for 25¢ from: Public Affairs Pamphlets, 22 E. 38th St., New York 16, N.Y.

New Appointments Made by World Commission on Cerebral Palsy

DR. GUY TARDIEU, director of the Rehabilitation Center for Children with Cerebral Palsy at the Hôpital Raymond Poincaré, Paris, France, was appointed chairman of the World Commission on Cerebral Palsy by Mr. Hall H. Popham, president of the International Society for Rehabilitation of the Disabled (formerly International Society for the Welfare of Cripples). The appointment was made immediately after the Eighth World Congress of the International Society, held in New York.

Newly appointed vice chairmen of the World Commission are: Dr. C. D. S. Agassiz, England; Mr. Bjorn Magnussen, Denmark; and Dr. Ben Epstein, Union of South Africa. Dr. Brewster S. Miller, medical director of the United Cerebral Palsy Associations, was appointed secretary of the Commission.

The World Commission on Cerebral Palsy, functioning under the sponsorship of the International Society for Rehabilitation of the Disabled, is composed of individual members appointed for outstanding work in their field. Cerebral palsy organizations in 11 countries are members of the Commission.

Study of Co-ordination of Community Services for Rehabilitation Reported

A FINAL report dated August, 1960, *Community Coordinating Office for Rehabilitation*, has been issued by the Easter Seal Society of Alameda County, Calif. The Office operated as a pilot project for one year under a grant from the Rosenberg Foundation, San Francisco. It was created in August, 1959, as a result of the need felt for the establishment in Alameda County of a specific service charged with co-ordination and integration of existing facilities. The large metropolitan county had been found to have scattered services provided by various agencies and hospitals. The Easter Seal Society implemented the program, which offered information and referral services to the County's physically disabled and provided registration and follow-up services for agencies serving them as a test of whether substantial improvement in co-ordination of agencies would result. Copies of the report are available without charge on request to: Easter Seal Society of Alameda County, 5017 Grove St., Oakland 9, Calif.

State Conferences on Handicapped Reported

RECENTLY PUBLISHED are the proceedings of a number of conferences on rehabilitation, held in several Southern states, which were supported by grants from The Nemours Foundation (Box 269, Rockland Rd., Wilmington 99, Dela.). Among these are the proceedings of the fifth annual North Carolina conference on handicapped children, held in Chapel Hill, Feb. 27 and 28, 1959; the Oklahoma conference held on Mar. 13 and 14, 1959, in Oklahoma City; the second West Virginia conference held Oct. 1, 1959, in Morgantown; the fourth Tennessee conference held Mar. 11 and 12, 1960, in Chattanooga; and the third Missouri conference held April 30, 1960, in Springfield and May 7, 1960, in Fulton. (A digest of the paper by Dr. Herbert W. Park given at the North Carolina conference appears in this issue of *Rehab. Lit.*)

IAL Institute Trains 22 Esophageal Voice Teachers

THE NUMBER of esophageal voice teachers in the United States was increased by 10 percent with the training of 22 at the first annual Institute of the International Association of Laryngectomees, cosponsored by the Office of Vocational Rehabilitation. The Institute was held at the Central Institute for the Deaf, Washington University, St. Louis, Mo., July 18 to August 4. Frank Kleffner, Ph.D., associate director of the Central Institute's division of speech pathology, directed the Institute.

Changes of Address

LIBERTY MUTUAL REHABILITATION CENTER of Boston. To: 372 Stuart St., Boston, Mass.
NATIONAL CYSTIC FIBROSIS RESEARCH FOUNDATION. To: 521 Fifth Ave., New York, N.Y.

National Council on the Aging To Be Launched New Year's Day

ON JANUARY 1, 1961, the National Committee on Aging, a standing committee of the National Social Welfare Assembly since 1950, will be reorganized as a National Council on the Aging. The Council will be separate from but affiliated with the Assembly. The Committee has been the recipient of two Ford Foundation appropriations, \$500,000 in 1956 and \$750,000 in 1959.

EVENTS AND COMMENTS

Rehabilitation That Works Both Ways

THE OCTOBER 1, 1960, issue of *Hospitals* (American Hospital Association, 840 N. Lake Shore Dr., Chicago 11, Ill.) carried an article "Hospital Work—Therapy for Delinquent Youths," by John F. Cronin, director of research, Greater Cincinnati (Ohio) Hospital Council. It describes a program set up in 1958 by the Hamilton County Juvenile Court after observing an improved attitude in boys given a work assignment involving elementary skills. Eight hospitals and institutions have co-operated. To date, supervised groups have worked 4,100 man-hours without accident or incident. The plan has been effective because it provides earnings, although modest, a training situation, therapy involved in doing good for others, the opportunity to work along with and receive the good example of trained adults, and a constructive use of leisure time. The boys have been given social contacts and exposure to those less fortunate than themselves. The youths do work such as washing windows, cleaning, painting, moving, chopping wood, and escorting and aiding patients on walks. Patients have been grateful for their help and institutions have benefited. For some boys the work experience gained has led to full-time permanent jobs instead of their becoming a burden to the community.

Dr. J. E. Wallace Wallin

Comments on Problems of the Aged

"THE PUBLIC IMAGE of the oldster as an irritable, cantankerous, crochety, eccentric individual, who is narrowminded, rigid, inept, amnesic, disruptive, deteriorated, and decrepit needs to be revised. It is true that about 33 percent of patients in mental hospitals are over 65, while 27 percent of first admissions to such hospitals are over 65. Many of the other oldsters at large are subject to minor maladjustments which are often produced by the frustrations to which they are subjected, such as: loss of jobs, loss of friends and relatives, financial and health worries, social discrimination, social isolation, being snubbed, 'cold shouldered,' ignored, belittled, or treated with disrespect, and the bleak hopelessness of a purposeless, unproductive future. Many of the ugly personality traits of the aged are socially produced and are amenable to preventive and reconstructive mental hygiene and educational treatment. . . .

"Aside from medical treatment for diseased conditions, the pivotal therapy of the aged is activity rather than inactivity. The 'rest cure' may be appropriate for some of the sick and neurasthenic, whether young or old, but it is not the prescription for the general run of the aged. Their salvation lies in keeping busy. The best form of activity therapy for them is creative work rather than

recreation, however valuable the latter may be. And there is no suggestion here to minimize its importance. Nevertheless, work therapy possesses unique value as a unifying, integrative, objectifying, rejuvenating force. It gives direction and purpose to existence. It provides dynamic motivation through interest-arousing achievements of economic worth. It prevents stagnation and deterioration. It tends to overcome the disintegrative tendency that springs from lack of concentration or dispersion of attention. It gives a sense of participation, economic worth, and social dignity. It generates feelings of self-confidence, self-respect and security. The work therapy concept predicates job placement in suitable jobs for remuneration. . . ."—From *"The Psychological, Educational, and Social Problems of the Aging, as Viewed by a Mid-Octogenarian,"* by J. E. Wallace Wallin, Ph.D., issued by the Division of the Aging, State Welfare Home, Smyrna, Dela. October, 1960.

Amputees' Driving Ability Studied

THE HARVARD School of Public Health has begun a one-year research project, supported by the Office of Vocational Rehabilitation, evaluating the ability of amputees to drive highway transport equipment. The Interstate Commerce Commission now prevents the operation of highway vehicles in interstate commerce by persons with certain types of amputations; in some states laws make it difficult for some amputees to obtain unrestricted driving permits. Dr. Ross A. McFarland, professor of environmental health and safety, the project's chief investigator, is also conducting a study for the armed forces on human factors in vehicular design and operation, with emphasis on accidents.

Workbooks and Guides Available for Teachers Of Mentally Retarded

OF INTEREST to teachers of children with retarded mental development are the following classroom manuals and guides that have been recently published.

Newspaper Reading, a workbook prepared for special education junior and senior high school students by Gary D. Lawson, Rt. #2, Box 2804, Elk Grove, Calif. (1960, 77 pages, \$1.60).

Money Makes Sense, a Workbook for Retarded and Slow Learning Pupils, by Charles H. Kahn and J. Bradley Hanna (1960, order from Fearon Publishers, Inc., 2263 Union St., San Francisco, Calif., \$2.00).

Three teachers' guides that may be ordered from The Athletic Store, Inc., Pennsylvania State University, University Park, Pa.: *Arithmetic Skills for Living and Learning* (1958, \$2.25); *Language Skills for Living and Learning* (1959, \$1.75); *Social Skills for Living and Learning* (1959, \$3.00).

Syracuse Center To Be Expanded in Pilot Study

THE PRESENT program of the rehabilitation center of the University Hospital of the Good Shepherd, Syracuse, N.Y., in a pilot project, will be expanded in its diagnostic and service facilities. The New York state departments of health, social welfare, education, and labor will use the center in their rehabilitation activities. The State Health Department is authorized to give the center financial assistance up to \$50,000 in the event of an operating deficit.

Employment of Paralyzed Veterans Surveyed

THE NOVEMBER, 1960, issue of *Paraplegia News* (240 Lee Ave., Stroudsburg, Pa.) reports the employment status of members of the Paralyzed Veterans of America, surveyed by means of a questionnaire sent to the more than 2,000 members. Of the 531 who replied, 48 percent were unemployed. Of these, 83 percent were reported as looking for employment and 61 percent as being able to work full time. Of the 232 paraplegics employed, 90 percent were satisfied with their jobs. High school education or better had been attained by 54 percent of those responding; 94 persons had college degrees. The employed and unemployed groups both averaged 38 years in age. The mean annual salary of those reporting was \$5,500. About 62.5 percent of those responding owned cars.

Dwight Guilfoil, Jr., PVA Employment Co-ordinator, compiled the questionnaire.

A Comment on

Parental Needs and Expectations

"MANY PARENTS view parent education as 'problem centered.' They come prepared to ask about problems. The idea that parent education is concerned with the growth and development of normal children is, as yet, not very widespread. The 'What do you do if?' questions by far outnumber all others. Discussions dealing with discipline, toilet training, feeding problems, and aggressive behavior seem to be scheduled with far greater frequency than those which deal with questions like children's interests, books and music, play, games, and toys. One gets the impression that the world of the parent and the child is largely one of problems and difficulties. Such a view of the child-rearing process creates a set or expectancy of which the parent educator must be aware."—From *Parent Education and the Behavioral Sciences; Relationships Between Research Findings and Policies and Practices in Parent Education*, by Armin Grams, p. 17, U.S. Children's Bureau, Washington, D.C. (Pubn. 379-1960). Available from U. S. Superintendent of Documents, Washington 25, D.C., at 25¢ a copy.

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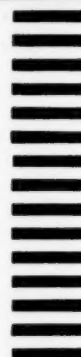
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Author Index

- Abbott, Marguerite, ed., 892
 Adkins, Hazel V., 961
 Alter, Milton, 951
 Am. Occupational Therapy Assn., comp., 890, 892
 Arnois, Dolores-Crystal, 956
 Arthur, John, 971
 Babow, Irving, comp., 894
 Barsch, Ray H., 908
 Beinart, G., ed., 910
 Belinkoff, Cornelia, 941
 Bertelsen, Arne, 893
 Bigler, John A., 887
 Bingham, H. G., 921
 Blumel, Johanna, 913
 Bobath, Berta, 910
 Bobath, Karel, 910, 916
 Boone, Daniel R., 950
 Bost, Frederick C., 963
 Bower, Eli M., 883
 Bowman, Peter W., 888 (ed.), 926
 Brara, N. S., 979
 Brett, Gladys, 922
 British Council for Rehabilitation of the Disabled, 971
 Browning, G. G., 971
 Budds, Frank C., 946
 Canty, Thomas J., 893
 Cape Province Cerebral Palsy Assn. (S. Africa), 910
 Capener, Norman, 893
 Capobianco, Rudolph J., 940
 Cooksey, F. S., 971
 Cooper, Irving S., 955
 Counihan, H. E., 971
 Cousens, Helen M., 971
 Cowan, Harry, translator, 881
 Cromwell, Rue L., 937
 Darley, Frederic L., 977
 Dassanaik, Kingsley C., 907
 Dederich, Robert, 893
 Dils, Charles W., 965
 Donahue, Laurence A., 956
 Dowling, Jessie P., 931
 Eagle, Edward, 935
 Early, Donal F., 942
 Eggers, G. W. N., 913
 Ekdahl, Miriam, 945
 Epstein, Ben, 911
 Eskesen, Bodil, 893
 Evans, E. Burke, 913
 Fabing, Howard D., 927
 Farmakides, Mary N., 950
 Fischer, Carl C., 895
 Florida. University. J. Hillis Miller Health Center, 974
 Foshee, James G., 937
 Frazier, Mae, 919
 Gage, Robert P., 903
 Gallaudet College, 924
 Goda, Sidney, 939
 Goldmann, Franz, 920
 Grob, Samuel, 945
 Group for the Advancement of Psychiatry. Comm. on Government Agencies, 964
 Hadley, Robert G., 978
 Hamlin, L. E., 980
 Hansen, Erik, 881
 Harrell, George T., 974
 Havas, Frederic de, 968
 Hejna, Robert F., 897
 Henderson, Ian R., 971
 Henderson, Robert A., 947
 Henry, Joseph J., 928
 Hepp, O., 893
 Herring, Marjorie B., 959
 Hettinger, Theodor, 960
 Himler, Leonard E., 943
 Hopkinson, Norma T., 904
 Hudson, Atwood, 954
 Hurlin, Ralph G., 905
 Hviid, Jorgen, 909
 Ickis, Marguerite, 885
 Internatl. Soc. for Rehabilitation of Disabled. Comm. on Prostheses, Braces, and Technical Aids, 893
 Jacobs, Bernard, 929
 Jansen, Knud, 893
 Jessop, W. J. E., 971
 Johnson, G. Orville, 940
 Johnstone, Rutherford T., 891
 Jordan, L. Russell, 974
 Katz, Jack, 904
 Keith, Haddow M., 903
 Keitlen, Tomi, 884
 Kerkhof, Arthur C., 930
 Kira, Alexander, p. 370
 Kuhn, G. G., 893
 Levine, Samuel, 917
 Levinson, Abraham, 887
 Littauer, David, 933
 Llorens, Lela A., 966
 Lobsenz, Norman M., 884
 London, P. S., 962
 Loon, Henry E., 893
 Lyquist, Erik, 893
 MacEntee, Sean, 971
 McKenzie, D. S., 893
 Madison, Harry L., 959
 Malek, Zena, 967
 Marquardt, Francis B., 944
 Mary Jane, Mother, 918
 Mase, Darrel J., 974
 Masters, F. W., 921
 Mautner, Hans V., ed., 888
 Meyer, Gerald, 970
 Milder, Benjamin, 957
 Miller, Donald Y., 940
 Miller, Martin B., 938
 Miller, Maurice H., 901
 Miller, Seward E., 891
 Missiuro, Włodzimierz, 953
 Moll, Kenneth L., 977
 Montan, Karl, 893
 Moore, J. N. P., 971
 Moore, Virginia Blanck, 896
 Murphy, Albert T., 906
 Myklebust, Helmer R., 923
 Natl. Epilepsy League, 927
 Netherlands Central Council for Care of the Disabled, 902
 New York University. Center for Rehabilitation Services, 889
 North Carolina Conference on Handicapped Children, 898
 O'Doherty, E. F., 971
 O'Flanagan, H., 971
 Okinaka, Shigeo, 948
 Olshansky, Simon, 945
 Palmer, Martin, 969
 Pappanikou, A. J., 926
 Park, Herbert W., 898
 Philpott, Harry M., 974
 Poor, Russell S., 974
 Pringle, Brian, 971
 Ribera, Victor, 972
 Rich, Mildred Kroll, 886
 Richardson, Stephen A., 973
 Richardson, William P., ed., 898
 Riklan, Manuel, 955
 Risch, Frank, 928
 Robbins, Nan, 925
 Robinson, D. W., 921
 Rodahl, Kaare, 960
 Rønn, G., 893
 Rusk, Howard A., 974
 Ryan, John P. A., 971
 Sato, Chiyoko, 952
 Sawyer, Glen Thomas, 949
 Schill, Herman Allen, 904
 Schottstaedt, Edwin R., 963
 Schwade, Edward D., 927
 Selkin, James, 970
 Shands, Alfred R., Jr., 974
 Sheehan, Joseph G., 978
 Shere, Marie Orr, 912
 Sibert, Katie N., 958
 Silva, J. Francis, p. 378
 Singh, Inder, 979
 Smith, Dorothy M., 974
 Somerville, James G., 971
 Stolurow, Lawrence M., 976
 Stubbs, Miriam M., 932
 Sutherland, David H., 963
 Swanson, Alfred B., 914
 Switzer, Mary E., 974
 Taarnhøj, Palle, 956
 Tallman, Irving, 917
 Thomas, Madison H., 927
 Thompson, T. Campbell, 929
 Thurston, John R., 915
 Tosberg, William A., 893
 Training School at Vineland (N.J.), 936
 United Community Fund of San Francisco. Health Council. Community Health Services Comm., 894
 U.S. Bur. of Labor Standards, 981
 U.S. Public Health Service. Div. of Hospital and Med. Facilities, 975
 Urner, Albert H., 967
 Weiss, Marian A., 893
 Wendland, Leonard V., 967
 Wepman, Joseph M., 900
 White, Gerald R., 978
 White House Conference on Children and Youth, 882
 Wilson, Donald V., 893
 Worden, Ralph E., 934
 Wright, Robert D., 899
 Zimmerman, James P., 934

The Annual Index for Volume 21, 1960, will be issued with the January, 1961, issue of *Rehabilitation Literature*.